

# MISSISSIPPI

## Project Status



US Army Corps  
of Engineers®  
Vicksburg District

*March 2013*



# Mississippi Project Status Book

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for March 2013

*This Project Status Book contains information on the latest progress of the Vicksburg District's projects in the State of Mississippi. You will find project maps with corresponding fact sheets for each project. Fact sheets cite authorization for the project and provide locations and project description information. Also provided are activities for the fiscal year 2013. District capabilities are included for additional funds that may become available. Additionally, important issues or impacts are supplied for a more detailed perspective of the project. The Vicksburg District publishes this book to provide valuable status information for ongoing projects. For your added convenience, a copy of this book in PDF format is provided on the disk attached below. However, if you should find you still have questions or need additional information about projects contained in this book, please contact:*

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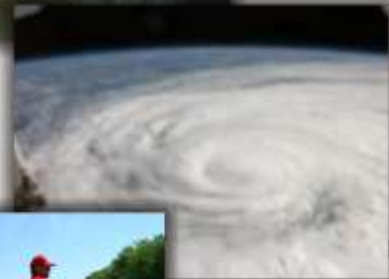
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# The Mississippi Valley Division

- We are 6 Interdependent Districts
- We have regional technical experts that bring expertise from the entire valley to work any water resource engineering challenge
- It is our pleasure to serve and provide the Nation's water resource engineering solutions
- We are...***BUILDING STRONG***





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# BIOGRAPHY



## Colonel Jeffrey R. Eckstein

*Commander, Vicksburg District*

Colonel Jeffrey R. Eckstein is the current District Commander for the Vicksburg District, Vicksburg, Mississippi. In this role he is responsible for navigation on 300 miles of the Mississippi River. He is also charged with flood risk management, environmental restoration and other projects within a 68,000 square mile area covering the states of Mississippi, Louisiana and Arkansas.

Colonel Eckstein is a native of Inverness, Florida. He is a 1985 graduate of the United States Military Academy with a Bachelors of Science in Civil Engineering. He received a Master's of Science in Civil Engineering from the University of Washington in 1994. He is a registered Professional Engineer in Florida and Virginia. His military education includes the Engineer Officer Basic and Advanced Courses at Fort Belvoir, Virginia, the Combined Arms Service and Staff School and Command and General Staff College at Fort Leavenworth, Kansas, and the United States Army War College at Carlisle Barracks, Pennsylvania.

Colonel Eckstein's company grade assignments include a tour in Germany where he served as a Platoon Leader and Battalion Intelligence Officer with the 54th Engineer Battalion (C)(M). While at Fort Benning, Georgia, he served in the 36th Engineer Group as an Assistant Operations Officer during Desert Storm and later as a Company Commander in the 43rd Engineer Combat Battalion (H) after the war. He participated in Hurricane Andrew cleanup and Operation Restore Hope in Somalia with the Battalion. Colonel Eckstein served as a Project Engineer with the Seattle District, United States Army Corps of Engineers executing construction projects at Fort Lewis, Washington. His projects included new construction, barracks upgrades, and historic renovation.

Colonel Eckstein's grade assignments include a second tour with the 36th Engineer Group serving as the Group Operations Officer and Design Engineer. He deployed to Nicaragua in support of Operation Fuerte Apoyo. He served as a Requirements Officer in the J8 of U.S. Joint Forces Command in Norfolk, Virginia. He commanded the 84th Engineer Combat Battalion (Heavy) in Hawaii. He deployed with the Battalion during OIF-2 and executed construction missions throughout Northern Iraq. Colonel Eckstein served as the G-7, Reconstruction Officer, for Multi-National Division North when 25th Infantry Division deployed in support of OIF 06-08. He then served as the Chief of Staff for the 25th Infantry Division. His previous assignment was the Senior Advisor for Infrastructure at the US Army Peacekeeping and Stability Operations Institute at Carlisle Barracks.

Colonel Eckstein is married and has three children.

# Congressional Districts in the Vicksburg District



## Governors and U.S. Senators

### ARKANSAS

Governor Mike Beebe  
Senator Mark Pryor  
Senator John Boozman

### LOUISIANA

Governor Bobby Jindal  
Senator David Vitter  
Senator Mary Landrieu

### MISSISSIPPI

Governor Phil Bryant  
Senator Thad Cochran  
Senator Roger Wicker

The Vicksburg District encompasses 68,000 square miles in Mississippi, Louisiana, and Arkansas. Seven major river basins fall into our jurisdiction including the mighty Mississippi, the Red, Ouachita, Pearl, and Yazoo Rivers. The District employs a diverse profile of professionals, over 1000 strong, divided between our Vicksburg, Mississippi headquarters and eleven field offices spread over all three states. Established in 1873, the District is a center of expertise for many engineering and environmental solutions and has been recognized as Vicksburg's second oldest business. The District operates and maintains \$2.3 billion in real property and projects.



#### Including:

- 9** watersheds in Arkansas, Louisiana, and Mississippi including Bayou Meto, Big Black, Boeuf Tensas, Homochitto, Mississippi, Ouachita, Pearl, Red, and Yazoo
- 7** Mississippi River Ports handling over 8.5 million tons of cargo
- 5** Red River Ports handling over 1 million tons of cargo
- 12** locks and **9** dams on the Pearl, Red and Ouachita Rivers
- 3** Power plants capable of generating 168,500 kilowatts of electricity
- 10** Lakes with 1,673 miles of shoreline
- 21** Pumping plants
- 478** Flood control structures
- 1,252** miles of navigable channel
- 1,910** Miles of levees, including 460 miles along the Mississippi River
- 450,603** Acres of project and mitigation lands are managed for forestry and wildlife enhancement
- 146** Recreation areas with 2,772 campsites and 1,529 picnic sites with total estimated visitors of 8,888,000



Colonel Jeffrey R. Eckstein  
Commander, Vicksburg District



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*Vicksburg District*  
Value to the Nation

# Mississippi River

## Benefits

Project	Average Annual Costs	Average Annual Benefits
Mississippi River and Tributaries	\$210 Million	\$1.46 Billion

## Benefit-to-Cost Ratios

The current remaining (FY13) benefit-to-cost ratio for the MR&T system is 45.3 to 1 and likewise the total benefit-to-cost ratio for the system is 3.3 to 1 at the 7% interest rate. The benefit-to-cost ratios are based on annualizing the remaining and total benefits associated with the completed project and dividing them by the respective annualized cost to achieve these benefits. All project benefits and cost are annualized at the 7% interest rate over the economic life of the project. For the MR&T the economic life is 100 years.

## Levees

Consists of raising, strengthening and extending levees to provide protection against flooding.



## Did you know?

The Mississippi River from its confluence with the Ohio River to Baton Rouge, LA supports the transport of over 176 million tons of cargo annually!

## Channel Improvement

Consists of stabilizing riverbanks in desirable alignment and obtaining the most efficient flow characteristics for flood control and navigation by revetments, dikes, foreshore protection and improvements. This improves navigation conditions, stabilizes berms, and reduces maintenance dredging requirements.



## Flood Risk Management

Flood risk management along the Mississippi River is provided through a coordinated system-wide water management program utilizing:

- Water storage reservoirs
- Levees
- Drainage Structures
- Channel Improvements
- Pumping Plants
- Weirs
- Sediment Reduction and Erosion Reduction Measures



## Environmental Stewardship

The Corps has developed an environmentally sustainable project with the philosophy to avoid and minimize adverse environmental impacts. When impacts are unavoidable, compensation is made for the loss.

- The Corps has created over 6,700 acres of aquatic habitat from borrow areas
- The Corps has reforested at least 3,000 acres of borrow areas

## Navigation

The Vicksburg District uses numerous tools to increase the safety and dependability of navigation on the Mississippi River.

- Dikes, revetments, and dredging are used to stabilize the navigation channel
- Channel Stabilization improves flow and reduces erosion
- The Vicksburg District supports two MR&T ports and five O&M ports

## MR&T Ports

MR&T Port	2011 Commercial Tonnage	Jobs Sustained	Annual Payroll
Greenville, MS	2,680,962	540	\$12,600,000
Vicksburg, MS	2,470,356	4,000	\$80,000,000

## O&M Ports

O&M Port	2011 Commercial Tonnage	Jobs Sustained
Rosedale, MS	1,401,472	325
Yellow Bend, AR	218,580	N/A
Lake Providence, LA	1,073,266	291
Madison Parish, LA	791,766	300
Claiborne Co., MS	N/A	N/A



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# Value to the Nation



# MISSISSIPPI RIVER Ports



## Port of Greenville

Natural slack water harbor 11 miles long is capable of holding several hundred barges. Wharf type double pier with concrete dock. The port is a designated U.S. Port of Entry.

Harbor and turning basin - 500 feet wide and 10,000 feet long, with a depth of 12 feet at the lowest river stages. Local commerce and vessels navigating the Mississippi River use the harbor facilities at Greenville.

Latest commercial tons - 2,470,000

5-year average tonnage - 2,599,000

Jobs sustained - 540

Annual payroll - \$12.6 million (\$6.3 million local purchases by industries)



## Port of Vicksburg

This 472-acre port began in 1968 and has risen to be one of the top inland ports in America. In 2004, the Port of Vicksburg was ranked 11th among U.S. inland ports based on top ton miles.

Harbor channel - includes a slack water channel 100 feet wide and 12,000 feet long and a 500-foot-wide channel on the Yazoo River Diversion Canal to the slack water channel, a distance of 13,000 feet. A minimum depth of 12 feet at the lowest Mississippi River stage is maintained.

Latest commercial tons - 2,681,000

5-year average tonnage - 3,083,000

Jobs sustained - 4,000

Annual payroll - \$60 million

Economic Impact - \$254.6 million

Designated Foreign Trade Zone, Port of Entry - maintains a U.S. Customs



## Port of Rosedale

The 2.3-mile slack water harbor is located on the Mississippi River in Bolivar County, Mississippi and is a primary staging area for barges to/from the Arkansas Navigation System.

250-acre industrial park - bird-side of Mississippi River levee system

Latest commercial tons - 1,401,000

5-year average tonnage - 1,627,000

Jobs sustained - 325

Catalyst for development in Southeast Arkansas



## Yellow Bend Port

This slack water, shallow draft port is located along the Mississippi River in DeSha County, Arkansas.

Latest commercial tons - 319,000

5-year average tonnage - 347,000

Catalyst for development in Southeast Arkansas



## Lake Providence Port

This slack water, shallow draft harbor is located along the Mississippi River in East Carroll Parish, Louisiana.

Latest commercial tons - 1,073,000

5-year average tonnage - 939,000

Jobs Sustained - 291

Annual Payroll - \$6 million payroll

Tax Contribution - greater than \$500,000 local and state taxes



## Madison Parish Port

The 10-acre, fast water, shallow draft port is located on the Mississippi River in Madison Parish, Louisiana.

Latest commercial tons - 792,000

5-year average tonnage - 541,000

Jobs Sustained - 300-400

U.S. Transportation Fuel Supply - 10%



## Claiborne County Port

Slack water, shallow draft harbor is located along the Mississippi River in Claiborne County, Mississippi.

The 10-acre port site adjoins a 400-acre industrial park. Facilities include a large wharf with concrete dock and a 600-foot by 400-foot turning basin.



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Value to the Nation



# Ouachita-Black Watershed

## Commodity Movements

Commodity	CY 2009	CY 2010	Short Tons	Short Tons
Crude Petroleum	272,172	254,065	272,172	254,065
Distillate Fuel Oil	274,067	207,467	274,067	207,467
Residual Fuel Oil	150,280	101,113	150,280	101,113
Nitrogenous Fertilizer	40,822	3,316	40,822	3,316
Phosphorous Fertilizer	7,480	30,341	7,480	30,341
Ammonia	638	65,595	638	65,595
Sodium Hydroxide	52,836	105,552	52,836	105,552
Industrial Salts	3,987	36,597	3,987	36,597
Limestone	170,356	181,708	170,356	181,708
Sand & Gravel	17,576	0	17,576	0
Highway Materials	45,330	0	45,330	0
Grains	11,251	59,812	11,251	59,812
Other	57,712	75,495	57,712	75,495

## Ports

Ports	Tonnage	Typical Cargo
Greater Ouachita	1,130,505*	Aggregates, oil, fuel, fabricated steel
Columbia	200,000**	Cotton seed and grain
*2008 Tonnage	**2007 Tonnage	



## Ouachita-Black Benefits

Benefits	Value
Transportation Savings	\$1,100,000,000,000
Jobs Sustained	28,000
Annual Payroll	\$325,000,000
Impact on Economy	\$3,000,000,000,000
Taxes Paid	\$140,000,000

## Recreation

18 Corps recreational areas along the 4 pools of the Ouachita-Black Navigation Project with 700,000 visitors annually - facilities include:

- 18 boat ramps with 48 lanes
- 16 day-use areas
- 1 swimming beach
- Two Class A campgrounds outgranted to local governments

## Environmental Stewardship

- Originally part of the project, the 65,000 acre Felsenthal National Wildlife Refuge lies adjacent to the Ouachita River in Arkansas
- The 15,500 acre D'Arbonne National Wildlife Refuge is located on Bayou D'Arbonne in Louisiana

## Flood Risk Management

Watershed management is provided through a coordinated system-wide water management program utilizing:

- Water storage reservoirs with over 3.5 million acre-feet of capacity
- Over 370 miles of levees along the Ouachita River, and in the Tensas-Cocodrie, Larto Lake to Jonesville, Sicily Island and Below Red River areas
- 120 miles of channel and tributary improvements along the Tensas River
- 5 pumping plants of 300 cfs, 500 cfs, 750 cfs, 4,000 cfs, and 6,500 cfs

## Navigation

- 337-mile Ouachita-Black Navigation Project provides for a 9-foot by 100-foot navigation channel from the mouth of the Black River to Camden, AR
- 4 Locks and Dams to regulate pool height and pass navigation
- Project supports approximately 28,000 private sector jobs with an annual payroll of \$325,000,000

## Water Supply

- Provides water supply for cities of Hot Springs, Malvern, Arkadelphia and Camden in Arkansas as well as Monroe, Louisiana
- Supplies water to nine major industries
- Provides water supply for crop irrigation



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# Value to the Nation

# Arkansas Lakes



## Blakely Mountain Dam - Lake Ouachita (1956)

Located along the Ouachita River in central Arkansas and surrounded by the Ouachita National Forest, the dam is 1,100 feet wide and 205 feet tall creating a lake 205 feet deep at the deepest level. The project includes 690 miles of shoreline, 40,000 acres of water and 20,000 acres of public land creating an abundance of recreational opportunities.



## DeGray Lake (1972)

Located along the Caddo River in south central Arkansas, the multi-purpose project includes 32,400 acres. DeGray Dam has a crest 3,400 feet wide and rises 243 feet above the river bed. The dam creates a lake 200 feet deep at its deepest level with 207 miles of shoreline.



## Narrow Dam - Lake Greeson (1950)

Located along the Little Missouri River in southwest Arkansas, Narrows Dam is 941 feet wide and rises to a height of the mean valley. The lake created by the dam, Lake Greeson, stretches 2 miles in length and is 150 feet at its deepest level and has 134 miles of shoreline. The project contains over 16,000 acres with over 15,000 acres forested.



**Friends of the Ouachita**  
Through an agreement with the Corps, the Friends of the Ouachita have taken on the operation of Crystal Springs and Tompkins Bend campgrounds at Lake Ouachita. Fees collected by the non-profit group are reinvested in facilities and upgrades at the lake.

## Lake Ouachita Water Reallocation Study

Officials from the City of Hot Springs and the Vicksburg District executed a Memorandum of Agreement in 20 February 2013 allowing for a water supply reallocation study at Lake Ouachita.

## Visitors

Project	2012 Visitors
Lake Ouachita	1,127,284
DeGray Lake	946,167
Lake Greeson	362,430

## Economic Impacts

Project	Economic Impact	Jobs Supported
Lake Ouachita	\$22,800,000	324
DeGray Lake	\$18,530,000	277
Lake Greeson	\$7,130,000	133

## A Corps First!

DeGray Lake holds the distinction as the first "pump back capable" impoundment in the history of the Corps of Engineers. A re-regulation dam forms a 400-acre impoundment directly below the main lake that serves as a storage basin for pump back capable features. During designated times, i.e. drought, the 28,000 KW generator can be reversed pulling water out of the Lower Lake into the main lake to be utilized again for hydropower generation. The 400-acre Lower Lake also serves as an ideal waterfront refuge.

## Did you know?

- DeGray Lake holds the distinction as the first "pump back capable" impoundment in history of the Corps of Engineers
- Narrows Dam is the only "all concrete" dam in the Vicksburg District
- The 3 Arkansas Lakes support over 700 jobs and provide nearly \$48,000,000 in economic benefits to local economies

## Blakely Mountain Dam - Lake Ouachita

Facilities include 18 recreation areas, with 18 campgrounds including five Class A areas, 7 day-use areas, 19 boat ramps with 66 lanes, and 10 swimming beaches



## DeGray Lake

Facilities include 15 recreation areas, with 8 campgrounds including six Class A areas, 7 day-use areas, 11 boat ramps with 55 lanes, and 8 swimming beaches



## Narrows Dam Lake Greeson

Facilities include 17 recreation areas, with 12 campgrounds including five Class A areas, 7 day-use areas, 9 boat ramps with 19 lanes, and 6 swimming



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# Value to the Nation

# Yazoo River Watershed



## Benefits

Project	Average Annual Costs	Average Annual Benefits
Upper Yazoo Projects	\$17,373,000	\$52,816,000
Delta Headwaters Project	\$24,917,000	\$24,917,000

### Main Stem

Consists of new and enlarged levee improvements along the Yazoo, Tallahatchie, and Coldwater Rivers from Yazoo City to Pritchard, MS, and channel clearing, cutoffs, and channel enlargement along the Yazoo, Tallahatchie and Coldwater Rivers.

### Upper Yazoo Projects

Includes channel and levee features along the main channel of the Yazoo, Tallahatchie and Coldwater Rivers from the vicinity of Yazoo City, MS to the confluence of Atakulla Creek with the Coldwater River stabilization, and stream / erosion control.

### Delta Headwaters Project

Consists of 16 watersheds ranging from 1 to 600 square miles, each featuring stabilization, grade control structures, floodwater-retarding structures and channel modifications for flood risk management, bank stabilization, and sediment/erosion control.

ARK

Value to the Nation

## Yazoo River Watershed

encompasses the delta area extending north from Vicksburg, MS to north of Clarksdale, MS and east from the Mississippi River to the hills east of Greenwood, MS. It consists of roughly 8,900 square miles including all or parts of 12 Mississippi counties. The watershed has an approximate length of 175 miles and an approximate width of 40 miles.

## Flood Risk Management

Flood risk management in the Yazoo River Basin is provided through a coordinated system-wide water management program utilizing:

- 4 water storage reservoirs
- 202 miles of levees
- 103 drainage structures
- 583 miles of channel
- 1 Pumping plant
- 8 Weirs
- Sediment reduction projects
- Erosion reduction measures

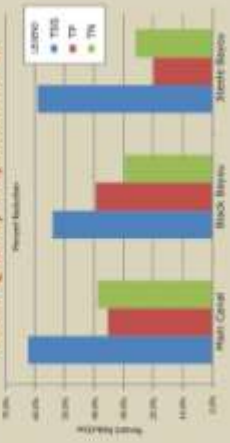
Area	FY 12 Flood Damages Prevented (\$1000)	Cumulative Flood Damages Prevented (\$1000)
Yazoo Backwater	16	98,094
Yazoo Headwaters	4,901	1,889,276
<b>Total Yazoo Basin</b>	<b>4,917</b>	<b>1,987,370</b>

## Environmental Stewardship

Since the early 1990s, the Vicksburg District has been involved with a flood control/sediment reduction project in the watershed which has dramatically improved water quality. Projects have included:

- Installation of low head weirs to maintain minimum water depths in channels
- Installation of 67 sediment control structures to prevent sediment from filling channels
- Water quality monitoring
- Large post-project reduction of in-stream suspended solids (TSS)

### Water Quality Improvements



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# Mississippi Lakes

## Sardis Lake (1940)

Sardis Lake stretches over 80,000 acres thru Pontchartraine and Marshall Counties in northwest Mississippi. Located approximately 1 hour from Memphis, TN and 30 minutes from the University of Mississippi, the lake is a popular destination for water related recreation.



## Arkabutla Lake (1943)

Located just 30 minutes from Memphis, TN and Tunica, MS, in Tate and DeSoto counties in north Mississippi, Arkabutla Lake covers over 11,000 acres and provides a variety of opportunities for all outdoor enthusiasts to enjoy.



## Benefits

Project	Average Annual Costs	Average Annual Benefits
Arkabutla Lake	\$5,000,000	\$33,300,000
Sardis Lake	\$5,000,000	\$34,200,000
Endicott Lake	\$5,000,000	\$32,000,000
Grenada Lake	\$5,000,000	\$39,000,000

## Grenada Lake (1954)

Located in the gently rolling hills of pine and hardwood at the entrance to the Mississippi Delta, The lake covers 30,000 acres and offers some of the best fishing opportunities in the Southeastern United States, and most any kind of water activity imaginable.



## Economic Impacts

Project	Economic Impact	Jobs Supported
Arkabutla Lake	\$20,000,000	237
Sardis Lake	\$34,550,000	464
Endicott Lake	\$16,280,000	190
Grenada Lake	\$54,130,000	742

## Endicott Lake (1952)

Located approximately 1 mile off Interstate 55, 72 miles south of Memphis, TN and 140 miles north of Jackson, MS, Endicott Lake encompasses over 44,000 acres and is visited each year by more than 1.5 million visitors. Endicott has been recognized as one of America's Top 10 Fishing Spots and is home of the world record white crappie.



## Visitors

Project	2012 Visitors
Arkabutla Lake	820,371
Sardis Lake	1,121,136
Endicott Lake	\$74,395
Grenada Lake	1,821,815

## Did you know?

- Over 3 million visitors find their way to one of the lakes' facilities year.
- Visitor spending at the North Mississippi Lakes represents a sizable component of the economies of local communities surrounding the lakes.
- Visitors spend over \$120 million annually with 52% being captured by local economies.
- Visitor spending supports the addition of over 1,600 jobs.

## Arkabutla Lake



Facilities include picnic areas with grills, group picnic shelters, variety of campgrounds, disc golf course, 4-mile mountain bike trail, hiking and walking trails, equestrian trail, boat ramps, ADA accessible fishing pier, ADA accessible playgrounds.

## Sardis Lake



Facilities include nine campgrounds (32 Class A campsites), restrooms, showers, boat ramps, group camps sites, cabins, picnic tables with grills, fishing areas, picnic shelters, sanitary disposal systems, playgrounds, and swimming beaches.

## Endicott Lake



Facilities include campgrounds, restrooms, equestrian trail, hiking trails, off-road vehicle trail, eight playgrounds, boat ramps, and five swimming beaches.

## Grenada Lake



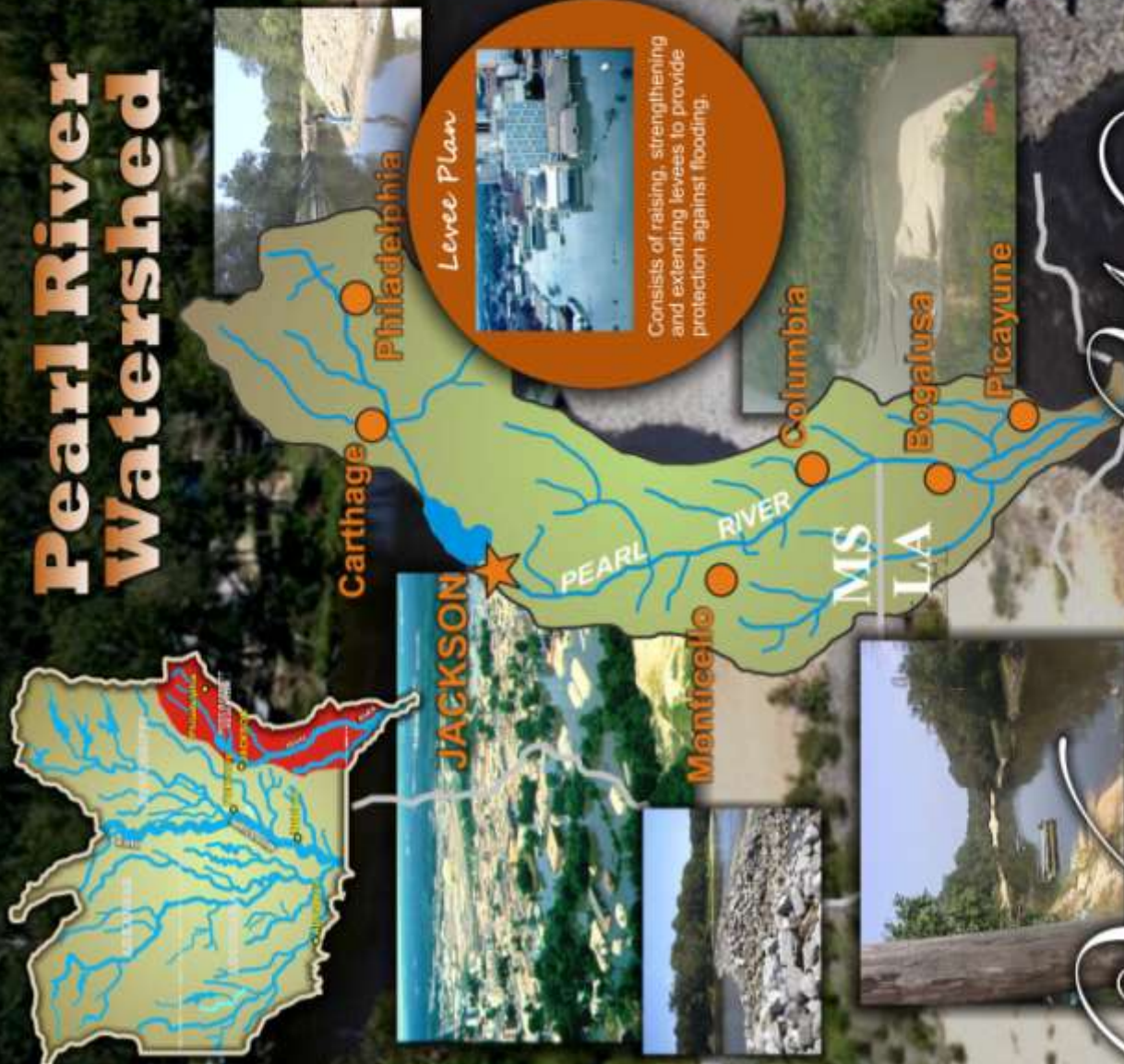
Facilities include campgrounds, restrooms, showers, boat ramps, group camps sites, picnic tables with grills, fishing areas, group picnic shelters, sanitary disposal systems, six playgrounds, and three swimming beaches.



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Vicksburg District

# Value to the Nation

# Pearl River Watershed



The Pearl River originates in Neshoba County, MS and meanders approximately 444 miles to empty into Lake Borgne. The Pearl River Watershed covers some 8,760 square miles and includes all or parts of 23 Mississippi Counties parts of 3 Louisiana Parishes.

## Flood Risk Management

The Jackson (Fairgrounds) and East Jackson levees were completed in 1968 by the Corps. These protective works consist of two earthen levees, four gates, outlets, and two pumping stations. Some 5.34 miles of river channel work was involved in constructing the plan. The Fairgrounds levee protects 420 acres in the Fairgrounds area of Jackson on the west side of the river. The longer East Jackson levee protects 5,870 acres, including the town of Pearl and portions of Flowood and Richtland. This project was sponsored by the Rankin-Hinds Pearl River Flood and Drainage Control District, which presently operates and maintains the levees. In 1984, an extension on the north end of the Fairgrounds levee was constructed to eliminate flanking of the levee.

Clearing of the floodway below the levee in Jackson was identified as an early action item to reduce Jackson flooding following the 1979 flood. The clearing plan, which was completed in 1984, extended from about 0.5 mile below the old Jackson sanitary landfill to Woodrow Wilson Bridge, a total of 3.3 river miles. The plan consisted of 237 acres of complete clearing, 20 acres of selective clearing, and 89 acres of partial clearing. To offset unavoidable impacts to fish and wildlife associated with the clearing plan, approximately 320 acres of bottomland hardwood were acquired as mitigation. The Pearl River Basin Development District is the local sponsor for this. In 2012, the Rankin-Hinds Pearl River Flood and Drainage Control District initiated a Section 211 Flood Risk Management Study to evaluate additional flood risk management alternatives for the Jackson, MS area. The study is funded 100 percent with non-Federal funds.

## Environmental Stewardship

In all aspects of natural and cultural resources management, the Corps promotes awareness of environmental values and adheres to sound environmental stewardship, protection, compliance and restoration practices. The Corps manages for long-term public access to, and use of, the natural resources in cooperation with other Federal, State, and local agencies as well as the private sector.

In late summer and early fall, virtually all of the Pearl River flow was captured by an area known as Wilson Slough. This left the main channel of the Pearl River in the vicinity of Walkish bluff completely dry in some locations leaving property owners and local citizens with no opportunity to enjoy the benefits of the river. For more than 20 years, locals tried to get a project to restore flows in the vicinity of Walkish Bluff. Using an authority established by Congress in 1990 which provided for environmental welland restoration the Corps began the Pearl River, Walkish Bluff Flow Distribution Project. The project was designed to restore flows in the Pearl River and once again make it a viable resource for both Mississippi and Louisiana.



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Vicksburg District

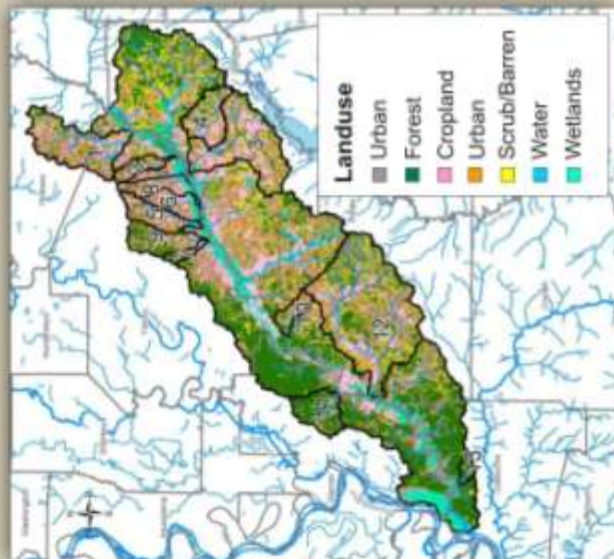
Value to the Nation

# Big Black River Basin



Authority needed to combat flooding, erosion, and sedimentation problems which leads to streambank caving, loss of fish and wildlife resources, poor water quality and adds to problem of Gulf Hypoxia Zone.

## Land Use in the Basin



## Environmental Stewardship

Nonpoint loading of sediment in a water body results from the transport of the material into receiving waters by the processes of mass wasting, head cutting, gullying, and sheet and rill erosion. Sources of sediment include:

- Agriculture
- Silviculture
- Rangeland
- Construction sites
- Roads
- Urban areas
- Mass wasting areas
- Gullies
- Surface mining
- In-channel and instream sources
- Historical landuse activities and channel alterations



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Value to the Nation

# Southwest Tributaries



Value to the Nation

The basin comprises a drainage area of approximately 3,200 square miles. All or parts of nine counties in southwestern Mississippi are included – Adams, Amite, Claiborne, Copiah, Franklin, Hinds, Jefferson, Lincoln, and Wilkinson. The basin extends in a north-south direction approximately 60 miles from just north of Port Gibson, MS, to the vicinity of the Mississippi-Louisiana state line on the south. It extends in an east-west direction approximately 55 miles from the Mississippi River on the west to Interstate 55 on the east. Three major streams—Buffalo River, Homochitto River, and Bayou Pierre drain most of the area and flow directly into the Mississippi River.

## Environmental Stewardship

Seeking authority to combat flooding, erosion, and sedimentation problems which leads to streambank caving, loss of fish and wildlife resources, poor water quality and adds to problem of Gulf Hypoxia Zone.

## EPA Level 3 Ecoregions



## Mississippi Loess Plain 74



US Army Corps of Engineers  
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# Bayou Meto



## Pump Station No. 1/Reservoir

A pump station that takes excess surface water from the Arkansas River, pumps it up into a reservoir to utilize gravity flow, and puts it into a delivery system for irrigation use.

## Little Bayou Meto Pump Station

A pump station that evacuates water from the Bayou Meto Basin and reduces flood damage on farmland and stress to bottomland hardwood forests that benefit waterfowl.

## Continuing Authorities Program Section 205

SMALL FLOOD CONTROL PROJECTS  
of the Flood Control Act of 1948  
Provides for local protection from  
flooding by the construction or  
improvement of flood control  
works.

The project area includes Lonoke, Jefferson, Prairie, Arkansas, and Pulaski Counties and involves the study of 1,350 square miles in a 433,166 acre Improvement Project Area (IPA) with 369,874 acres of irrigated cropland.

## Flood Risk Management

The project includes a pump station to evacuate water from the Bayou Meto Basin and reduces flood damage on farmland and stress to bottomland hardwood forests that benefit waterfowl management.

Jacksonville and Sherwood, AR have requested participation in individual Section 205 projects designed to assist with small flood control projects which will improve Flood Risk Management potential for the communities.

## Environmental Stewardship

The project area includes 10,000 acres of herbaceous wetland complexes, along with riparian buffers and improvements to the Bayou Meto Wildlife Management Area to provide environmental restoration and enhancement features.

## Water Supply

The project has features which divert excess water from the Arkansas River via a delivery system that contains pump stations, incorporates a system of new canals, existing streams, and pipelines to deliver water to depleted areas.

## Project Features:

- 107 Miles of New Canal
- 1,750 CFS Pump Station
- Riparian Buffers
- 128 Miles of Channel Work
- 10,000 Acres of Herbaceous Wetland Complexes
- 132 Miles of Ditch Enlargements
- 465 Miles of New Pipeline
- Bayou Meto Wildlife Management Improvements



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# Value to the Nation

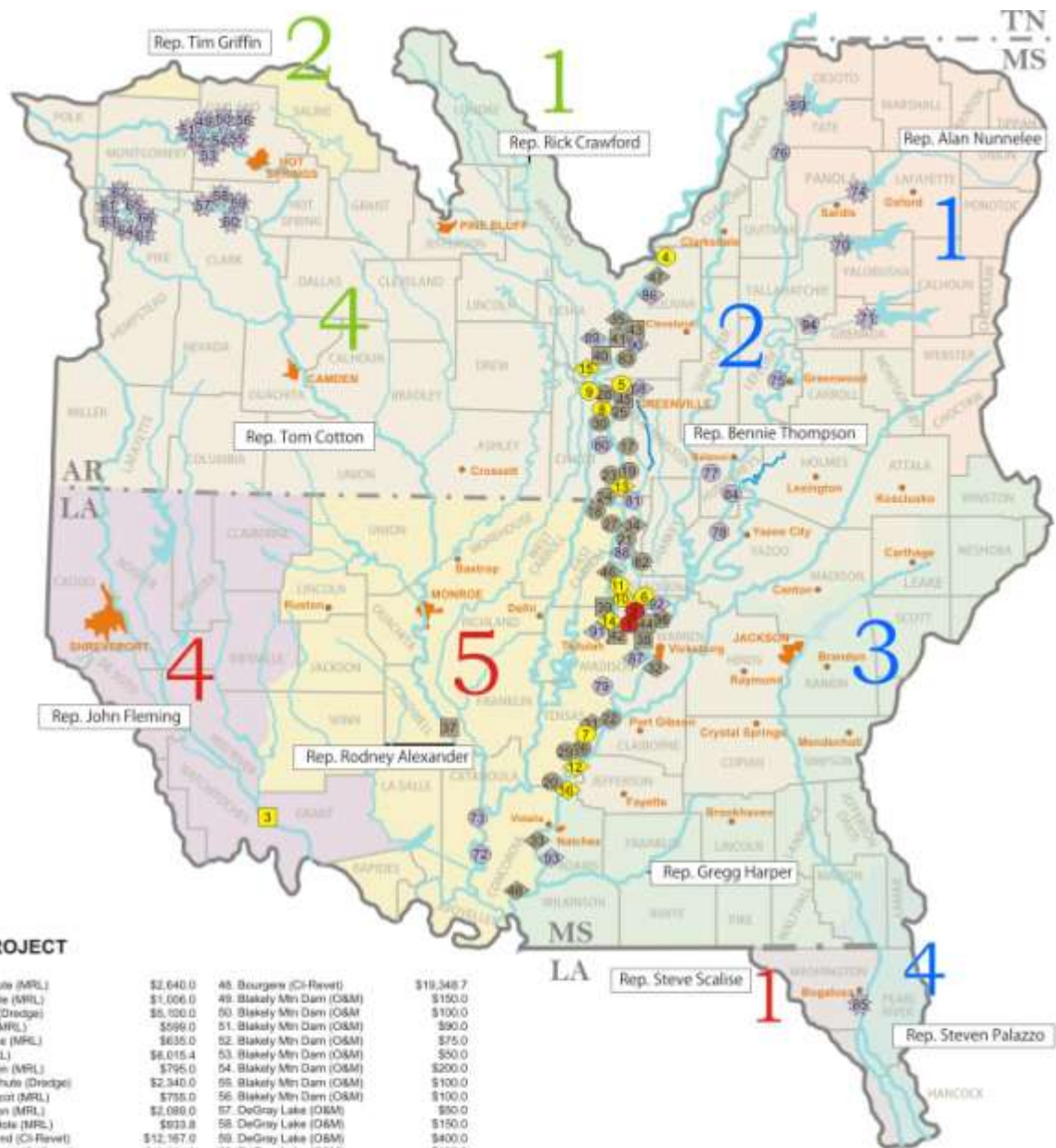
# FUNDING TABLES

FY 13 WORK IN MISSISSIPPI									
Cong Distr	Approp/Project	FY 12 Allocations	Supplemental Allocations	FY 13 Budget	House Amount	Senate Amount	Additional Needs	Total	WORK WHICH COULD BE ACCOMPLISHED WITH ADDITIONAL FUNDS
Investigations									
LA-1 MS-4	West Pearl Nar (Deaath)	0	0	0	0	0	0	100	Complete recon study directed at deauthorization and disposal of project
Total Investigations		0	0	0	0	0	0	100	
Construction									
MS-1, 2, 3, 4	Section 582 Projects	220	0	0	0	0	11,000	11,000	Fully fund four new projects
CAP									
MS-1, 2	McKinney Bayou, Tunica Co., MS	463	0	0	0	0	3,230	3,230	Fully fund construction
Total Construction		683	0	0	0	0	14,230	14,230	
Operation and Maintenance									
MS-1	Insp of Completed Works	279	0	361	346	361	300	661	Fully fund levee safety and periodic inspections of Red River levees (\$200.0) and Pearl River levees in Rankins Hinds Levee District (\$100.0)
MS-2	Mouth of Yazoo River	38	725	30	29	30	270	300	Fund dredging
MS-2	Rosedale Harbor	0	3,300	11	11	11	1,739	1,750	Fund dredging
MS-2	Yazoo River, MS	0	0	26	25	26	128	154	Fund clearing and snagging
MS-3	Claborn County Port	0	0	1	1	1	74	75	Fund dredging
MS-4	Pearl River	129	2,500	145	140	145	0	145	No additional needs
Total Operation and Maintenance		447	6,525	574	554	574	2,511	3,085	
Regulatory Functions		3,750	0	3,750	3,488	3,750	0	3,750	To support others/Corps statutory requirements and to enhance preparedness and responsiveness of EOC and volunteer members during local and national emergencies.
Flood Control & Coastal Emergency		1,081	0	544	490	544	29	573	
	SUBTOTAL REGULAR APPROP	5,961	6,525	4,866	4,532	4,868	16,870	21,738	

Comp Dist	Approp/Project	FY 12 Allocations	Supplemental Allocations	FY 13 Budget	House Amount	Senate Amount	Additional Needs	Total	WORK WHICH COULD BE ACCOMPLISHED WITH ADDITIONAL FUNDS
MR&T Investigations									
MS *	Collection & Study of Basic Data	570	0	170	163	170	2,060	2,230	Fully fund collection of essential hydrologic data used in flood predictions, planning and design of authorized flood control projects across the District (\$400.0), aquatic and water quality monitoring within the Vicksburg District (\$460.0), and continue LIDAR mapping in the Vicksburg District (\$1,300.0)
MS-1.2	Big Sunflower Watershed, MS (Gunter Rv)	100	0	0	0	0	300	300	Continue feasibility phase
Total MR&T Investigations		670	0	170			2,360	2,530	
MR&T Construction									
MS *	Mississippi River Levees	13,735	6,693	20,428	19,898	20,925	3,000	23,925	Award Item 511L
MS *	Channel Improvement	23,225	14,075	20,614	19,872	20,614	26,400	47,014	Fully fund dike construction at Lake Providence, LA-HM483H (\$8,805.0), Racine Lock Towhead, MS-69M 432H (\$4,500.0) and Willow Cutoff, LA-HM-462 BH (\$1,500.0), and construct an upstream extension to the existing leveements at Grand Gulf (\$4,460.0) and Togo Island (\$7,140.0)
MS-1.2	Upper Yazoo Projects	119	0	0	0	0	16,850	16,969	Continue design of Items 70 and 6A (\$500.0), fully fund Item 70, Phase II (\$10,350.0) and Lambdin Bypass Channel (\$6,000.0), including construction management
MS-1.2	Main Stem	25	0	0	0	0	25	25	Monitor Shady Ridge bank stabilization
MS-1.2	Big Sunflower River	316	0	0	0	0	1,700	1,700	Fully fund Sediment Reduction Structures Phase VI (\$500.0) and continue water quality and sediment and nutrient monitoring (\$600.0)
MS-1.2	Yazoo Backwater Multi-Agency Interpretive and Education Center	235	0	0	0	0	3,907	3,907	Fund construction of the Multi-Agency Interpretive and Education Center
MS-1.2	Yazoo Backwater Less Hockey	50	0	0	0	0	4,575	4,575	Continue operation of the Greentree Reservoirs for mitigation purposes (\$75.0) and continuing purchase of mitigation lands for unavoidable environmental losses from previously constructed projects (\$4,500.0)
MS-1.2	Reformulation Study	0	0	0	0	0	500	500	Continue reformulation studies
MS-1.2	Delta Headwaters Project	5,834	2,725	0	0	0	13,000	13,000	Fully fund 2 bank stabilization (\$1,600.0) and 3 river piers (\$1,600.0) contracts; continue design efforts (\$6,100.0); construction management (\$2,400.0); and continue site monitoring by NRC-SUSDS (\$900.0)
Total MR&T Construction		43,575	23,493	41,042	39,770	41,549	69,957	111,526	

Cong	Appropriation/Project	FY 12	Supplemental	FY 13	House	Senate	Additional	Total	WORK WHICH COULD BE ACCOMPLISHED WITH ADDITIONAL FUNDS
Distr		Allocations	Allocations	Budget	Amount	Amount	Needs		
MS-1	M&T Maintenance								
AR, LA, MS	Mississippi River Levees	2,261	5,470	1,690	1,616	1,690	0	1,690	No additional needs
AR, LA, MS	Revisions & Dikes	14,707	66,330	12,983	12,384	12,683	6,700	19,383	An additional 1570 articulated concrete mat (ACM), stone bank paving, and stone repairs
AR, LA, MS	Dredging	7,142	4,600	5,023	4,826	5,023	0	5,023	No additional needs
AR, LA, MS	Mapping	399	0	298	285	298	300	600	Additional mapping assistance for work in the CAD/CADD, topographic, hydrographic, or geospatial areas
AR, LA, MS	Imp of Completed Works	571	0	364	353	364	300	664	Fully fund levee safety (\$100.0), periodic inspections (\$150.0), and Levee Screening Tool (\$50.0)
MS-1	Sardis Lake	8,711	150	6,493	6,215	6,493	4,870	11,363	Achieve acceptable levels of service (\$955.0); replace Clear Creek water storage tank & rehab Hurricane Lending water storage tank (\$175.0); realign and raise State Park Road (\$2,150.0); P&S and construction for Paradise Point Parking and Beach (\$1,325.0); P&S to replace joint sealing in collection ditches on the dike (\$65.0); and sandblast and paint Intake Structure Bridge (\$250.0).
MS-1	Acaculla Lake	4,837	700	5,203	4,981	5,203	4,758	9,961	Achieve acceptable levels of service (\$1,100.0); re-route North Overflow Spillway Drop-Inlet Drain (\$50.0); construct Pratt Road to Spillway Bridge (\$2,175.0); install ditch culverts at Outlet Channel (\$150.0); replace antiquated public-use restrooms at Bayou Point and Oak Point Boat Ramps (\$200.0); and develop design and modernize Hernandez Point Day Use (\$1,083.0).
MS-1	End Lake	4,754	150	4,795	4,590	4,795	2,301	7,146	Achieve acceptable level of service (\$1,040.0); replace joint materials at Outlet Channel & Silling Basin Chute (\$200.0); replace cable on overhead crane at Intake Structure (\$30.0); blast and paint Emergency Spillway Bridge (\$120.0); replace flood damage reduction equipment (2 doors & mini-excavator (\$450.0); water well Perimeter Hill (\$461.0); and prepare P&S for accessible fishing pier at Outlet Channel (\$50.0).
MS-1	Grenada Lake	5,642	300	5,222	4,999	5,222	2,470	7,692	Achieve acceptable level of service (\$1,065.0); remedial work relief wells (\$600.0); EMD design to rehab outdated Visitor Center Exhibits (\$190.0); dam safety equipment (dump truck) (\$150.0); construct ACM fishing pier at Outlet Channel (\$155.0); replace powerhouse at North Grayport (\$150.0); upgrade restroom at Bryant (\$100.0); GIS/GPS equipment (\$25.0); pavilion & restroom beach at Overlook (\$175.0).
MS-1.2	Greenwood	926	0	796	754	796	1,920	2,713	Achieve acceptable levels of service (\$600.0) and for levee safety related work (\$1,125.0)
MS-1.2	Yazoo City	1,174	0	714	683	714	120	839	Fund levee safety related work (\$120.0)
MS-1.2	Main Stem	2,527	3,810	1,273	1,219	1,273	2,225	3,498	Achieve acceptable levels of service (\$1,700.0); maintenance and development of wildlife mitigation areas (\$400.0), and levee safety related work (\$125.0)
MS-1.2	Tributaries	1,562	0	944	904	944	200	1,144	Achieve acceptable levels of service (\$200.0)
MS-1.2	Whittington Auxiliary Channel	1,494	0	375	309	375	116	491	Achieve acceptable levels of service (\$116.0)
MS-1.2	Big Sunflower Maintenance	165	0	177	169	177	400	577	Maintain acceptable level of service (\$300.0) and continue wetland and aquatic monitoring within the project area (\$100.0)
MS-1.2	Yazoo Backwater	517	376	511	489	511	1,120	1,636	Fabrication of scoops for Steele Bayou structure (\$1,000.0); maintenance and development of wildlife mitigation areas (\$100.0); and conduct HSS inspections of Steele Bayou stoplogs (\$25.0)
MS-2	Greenville Harbor, MS	16	2,100	23	22	23	1,477	1,500	Fund maintenance dredging
MS-2	Vicksburg Harbor, MS	31	2,000	41	39	41	1,169	1,200	Fund maintenance dredging
Total	MRAT Maintenance	57,260	86,086	46,617	44,868	46,617	30,501	77,122	
	SUBTOTAL MRAT APPROP	101,505	112,179	65,356	64,656	65,356	102,838	191,194	
TOTAL ALL APPROPRIATIONS		107,466	118,704	93,224	89,190	93,054	119,708	212,936	
	Multi-State Projects								

# **Supplemental Funds**



## Vicksburg District Operation Watershed Recovery Projects

### PROJECT

1. Buck Chute (MRL)	\$2,640.0	46. Bourgeois (CI-Revet)	\$19,348.7
2. Albemarle (MRL)	\$1,006.0	49. Blakely Min Dam (O&M)	\$150.0
3. JBJW (Dredge)	\$5,000.0	50. Blakely Min Dam (O&M)	\$100.0
4. Francis (MRL)	\$596.0	51. Blakely Min Dam (O&M)	\$90.0
5. Winterville (MRL)	\$635.0	52. Blakely Min Dam (O&M)	\$75.0
6. Tara (MRL)	\$6,015.4	53. Blakely Min Dam (O&M)	\$50.0
7. Lake Bruin (MRL)	\$795.0	54. Blakely Min Dam (O&M)	\$200.0
8. Leland Chute (Dredge)	\$2,340.0	55. Blakely Min Dam (O&M)	\$100.0
9. Lake Chicot (MRL)	\$755.0	56. Blakely Min Dam (O&M)	\$100.0
10. Henderson (MRL)	\$2,080.0	57. DeGray Lake (O&M)	\$50.0
11. Ice Box Hole (MRL)	\$833.8	58. DeGray Lake (O&M)	\$150.0
12. Kemp Bend (CI-Revet)	\$12,167.0	59. DeGray Lake (O&M)	\$400.0
13. Walnut Point (CI-Revet)	\$11,361.0	60. DeGray Lake (O&M)	\$100.0
14. Milliken Bend (CI-Revet)	\$3,175.0	61. Narrows Dam (O&M)	\$60.0
15. Cypress Bend (CI-Revet)	\$2,933.5	62. Narrows Dam (O&M)	\$170.0
16. Gibson (CI-Revet)	\$2,085.0	63. Narrows Dam (O&M)	\$200.0
17. Avon Cont (MRL)	\$1,608.0	64. Narrows Dam (O&M)	\$100.0
18. Willow Lake Cont (MRL)	\$2,936.0	65. Narrows Dam (O&M)	\$120.0
19. Leota Cont (MRL)	\$688.0	66. Narrows Dam (O&M)	\$50.0
20. Lake St. John Cont (MRL)	\$158.0	67. Narrows Dam (O&M)	\$75.0
21. Ben Lomond Cont (MRL)	\$790.0	68. Leland Levee (CI-Dike)	\$1,525.0
22. Davis Landing Cont (MRL)	\$1,670.8	69. Arkabutla Lake (O&M)	\$700.0
23. Lake Jackson Cont (MRL)	\$1,123.0	70. Eriid Lake (O&M)	\$150.0
24. Grand Lake Cont (MRL)	\$793.0	71. Grenada Lake (O&M)	\$300.0
25. Greenville (MRL)	\$788.1	72. Red River BW - Sicily (MRL)	\$602.0
26. St. Joe Cont (MRL)	\$245.0	73. Red River BW - Junesville (MRL)	\$1,506.0
27. Wilson Pt Cont (MRL)	\$1,288.8	74. Sarda Lake (O&M)	\$150.0
28. AR 2250 Cont (MRL)	\$225.2	75. Main Slem (YB)	\$100.0
29. Kempe Bend Cont (MRL)	\$121.0	76. Main Slem Colwater (Levee)	\$5,819.2
30. Lake Chick Pump (MRL)	\$1,611.0	77. Tribes (MRL)	\$100.0
31. Hardcorable (CI-Revet)	\$3,642.0	78. Will Whittington (MRL)	\$100.0
32. 610-320 Cont (CI-Revet)	\$10,082.7	79. WB LA Levee Slides (MRL)	\$4,616.9
33. Monfille (CI-Revet)	\$3,324.0	80. WB AR Levee Slides (MRL)	\$400.0
34. Mayersville (CI-Revet)	\$2,187.0	81. EB MS Levee Slides (MRL)	\$1,557.8
35. Bag Island (CI-Revet)	\$0	82. Regular Survey Markers (MRL)	\$2,000.0
36. Yazoo BW Muddy (Str)	\$126.0	83. Gravel (MRL)	\$3,337.7
37. Ouachita and Black (Dredge)	\$3,200.0	84. Yazoo BW Slides (MRL)	\$3,385.0
38. Mouth of Yazoo (Dredge)	\$725.5	85. Pearl River Lock 2	\$2,000.0
39. Lake Providence (Dredge)	\$3,900.0	86. Euse-Mounds Revetment	\$5,796.8
40. Yellow Bend (Dredge)	\$665.0	87. Rock Bedford Revetment	\$1,718.7
41. Rosedale (Dredge)	\$3,350.0	88. Prior-Cottonwood	\$1,886.9
42. Madison Port (Dredge)	\$750.0	89. Ashbrook Island	\$2,243.0
43. Victoria Bend (Dredge)	\$10,450.0	90. Miller Bend	\$11,528.0
44. Vicksburg Harbor (Dredge)	\$2,850.0	91. False Point Revetment	\$3,349.5
45. Greenville (Dredge)	\$2,150.0	92. Marshall Brown Dikes	\$13,150.0
46. Goodrich (CI-Revet)	\$10,895.0	93. Bougees Revetment	\$9,413.0
47. Darnes (CI-Revet)	\$6,175.0	94. DHP	\$2,735.0

TOTAL \$237,048.8

### USACE FRAGO Risk Classification

- Class I
- Class II
- Class III
- Class IV

### Category

- MRL
- Dredge
- CI-Revet
- O&M
- Structure

# Vicksburg District Operation Watershed Recovery Projects - Mississippi

## PROJECT

1. Buck Chute (MRL)	\$2,640.0
2. Albermarle (MRL)	\$1,006.0
3. Francis (MRL)	\$599.0
5. Winterville (MRL)	\$635.0
6. Tara (MRL)	\$8,015.4
7. Walnut Point (CI-Revet)	\$11,361.0
8. Avon Cont (MRL)	\$1,608.0
9. Leota Cont (MRL)	\$698.0
10. Ben Lomand Cont (MRL)	\$790.0
11. Lake Jackson Cont (MRL)	\$1,123.0
12. Greenville Cont (MRL)	\$769.1
13. 610-320 Cont (CI-Revet)	\$10,082.7
14. Mayersville (CI-Revet)	\$2,187.0
15. Yazoo Backwater-Muddy (Str.)	\$126.0
16. Mouth of Yazoo (Dredge)	\$725.0
17. Rosedale (Dredge)	\$3,300.0
18. Victoria Bend (Dredge)	\$10,450.0
19. Vicksburg Harbor (Dredge)	\$2,800.0
20. Greenville (Dredge)	\$2,100.0
21. Dennis (CI-Revet)	\$6,179.0
22. Leland Legrange (CI-Dike)	\$1,525.0
23. Arkabutla Lake (O&M)	\$700.0
24. Enid Lake (O&M)	\$150.0
25. Grenada Lake (O&M)	\$300.0
26. Sardis Lake (O&M)	\$150.0
27. Main Stem (YB)	\$100.0
28. Main Stem Coldwater (Levee)	\$5,819.2
29. Tribs (MRL)	\$100.0
30. Will Whittington (MRL)	\$100.0
31. EB MS Levee Slides (MRL)	\$1,557.6
32. Repair Survey Markers (MRL)	\$666.7
33. Gravel (MRL)	\$3,337.7
34. Yazoo BW Slides (MRL)	\$3,385.0
35. Eutaw Mounds (CI-Revet)	\$5,796.8
36. Miller Bend (CI-Revet)	\$11,525.0
37. Fittler Cottonwood (CI-Revet)	\$1,986.9
38. Marshall Brown (CI-Dikes)	\$13,150.0
39. Bougere (CI-Revet)	\$9,413.0
40. DHP	\$2,725.0
<b>Total</b>	<b>\$129,682.1</b>

## USACE FRAGO Risk Classification

- Class I
- Class II
- Class III
- Class IV

## Category

- MRL
- Dredge
- ◆ CI-Revet
- ✱ O&M
- ◆ Structure





US Army Corps  
of Engineers  
Vicksburg District

## Project Fact Sheet Supplemental Funding - PL 112-77

### O&M and MR&T, Construction and Maintenance (FRM, NAV)

**Location:** Throughout the Vicksburg District.

**Description:** The Mississippi River and Tributaries (MR&T), a legacy flood damage reduction system performed, as designed under tremendous and prolonged pressure from the historic 2011 flood event. It is the Flood of Record for most gauges between Cape Girardeau, MO and the Gulf of Mexico. Not a single life was lost to flooding in the areas across seven states protected by the MR&T system. Since its inception, the MR&T system is credited with preventing \$612 billion, or in excess of half a trillion dollars, in cumulative flood damages. At an investment level of \$14 billion, those savings result in a \$44 return on every \$1 invested. The 2011 flood fight is the first time the total watershed system required operation in a synchronized manner in order to manage the highest level of water it has ever seen.

**Issues:** Many of our flood control, navigation systems, and other facilities remain in a state of vulnerability and risk as a result of the Flood of 2011 and other Federally declared disasters.

**Importance:** Flood control systems protect lives and property. Levees hold back floodwaters; river training structures improve navigation, stabilize bends, and reduce maintenance dredging requirements. Revetment construction maintains channel alignment and protects the banks from erosion while numerous other facilities serve the many public needs across the area.

**Risk:** Subsequent flood seasons will require extreme vigilance and advanced preparedness to ensure safety and security of citizens, infrastructure and industry. Safe and secure Corps facilities, as well as operation of the MR&T system, is required to preserve the Nation's valuable infrastructure investment.

**Consequence:** Catastrophic damage to the navigation channel, river banks, and adjacent mainline levee is likely to occur if the system is not repaired/constructed as planned. During the Flood of 2011 an estimated 1.4 million residential and commercial structures, 10 million acres of land, as well as 3.6 million people would have been impacted had the MR&T not functioned as designed.



Figure 1.  
LeLand – LaGrange Damage



Figure 2.  
Leland – LaGrange Repairs Nearing Completion

**Supplemental Funding (\$000) - FY 12-15**

Project	Category	FY 12	FY 13	FY 14	FY 15
J.BJWW	Dredge	5,100.0			
Oua-Black	Dredge	3,200.0			
Mouth of Yazoo	Dredge	725.0			
Lake Providence	Dredge	3,900.0			
Yellow Bend	Dredge	465.0			
Rosedale	Dredge	3,300.0			
Madison Parish Port	Dredge	750.0			
Blakely Mt. Dam	O&M/REC	865.0			
DeGray	O&M/REC	700.0			
Narrows Dam	O&M/REC	775.0			
Pearl River	Struct	2,500.0			
MRL Const	Levees/Struc	6,693.0	25,210.2	975.0	\$0.0
CI Const	CI	14,075.5	14,415.5	521.0	
DHP	Struct	2,725.0			
MRL Maint	Levees	5,470.0	4,442.7		
CI Maint	CI/Dredge	73,130.0	37,037.5	3,323.5	
Yazoo Backwater	Levees/Struc	376.0	3,135.0		
Red River Backwater	Levees	852.0	1,346.0		
Sardis Lake	O&M/REC	150.0			
Arkabutla Lake	O&M/REC	700.0			
Enid Lake	O&M/REC	150.0			
Grenada Lake	O&M/REC	300.0			
Main Stem	Levees	3,510.0	2,409.2		
Tributaries	Levees		100.0		
Will Whittington	Levees		100.0		
Greenville Harbor	Dredge	2,100.0			
Vicksburg Harbor	Dredge	2,800.0			
<b>Total</b>		<b>135,311.5</b>	<b>\$8,196.1</b>	<b>4,819.5</b>	<b>\$0.0</b>

FY 12 shows actual allocations received in FY 12.

FY 13-FY 15 are current cost estimates of approved work.

**Acquisition Strategy:** Seven MRL items, stone bank paving associated with revetment and stone repairs, Yazoo Backwater Little Sun Borrow, and Main Stem Silver City levee setback contracts are scheduled to be awarded in FY 2013.

**Amount That Could Be Used in FY 13:** See table.

**Project Sponsor/Customer:** Mississippi Levee Board, Fifth Louisiana Levee Board, Southeast Arkansas Levee District, Red River Waterway Commission, Ouachita River Valley Association

**Congressional Interest:** Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), Alexander (LA-5), Thompson (MS-2), and Harper (MS-3).



Figure 3.  
Walnut Point/Kentucky Bend Damage



Figure 4.  
Walnut Point/Kentucky Bend ACM Placed – Placing Stone Bank Paving





# **Investigations**



# Investigations

# Investigations

The major objective of the Investigations program is to study projects that provide solutions to water resource problems. The Corps undertakes studies in response to directives (authorizations) from Congress. Congressional authorizations are contained in public law and in resolutions of either the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee.

Most studies are conducted in two phases--reconnaissance and feasibility. The reconnaissance phase is fully funded by the Federal Government and is usually completed in 12 months. The purpose is to define the problem, opportunities, and identify potential solutions. It also determines whether or not planning should proceed into the feasibility phase based on a preliminary appraisal of the Federal interest, cost, benefits, and environmental impacts of the identified potential solution. The phase is completed upon the signing of the Feasibility Cost-Sharing Agreement (FCSA) by the Corps and a project sponsor.

The feasibility phase can take up to 3 years to complete and is cost shared equally between the Federal Government and the non-Federal sponsor. The report results in recommendations to Congress for or against Federal participation in solutions to the water resource problem and opportunities identified in the study. A recommendation for Federal participation identifies a recommended plan/project, generally for construction authorization and funding.

The Preconstruction, Engineering and Design Studies (PED) phase of project development encompasses all planning and engineering necessary for project construction, after release of the report and Division Engineer's public notice on a favorable study. Preparation of design memorandums and plans and specifications will be cost shared in accordance with the cost sharing required for project construction.



Pearl River Watershed, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet Pearl River Watershed, MS

Water Resources Development Act of 2007, Sec 3104

### Investigations (FRM)

**Location:** The study area consists of that portion of the Jackson, Mississippi, metropolitan area below the Ross Barnett Reservoir dam which is subject to flooding from the Pearl River.

**Description:** The Jackson Metropolitan Area, a primary regional economic center, suffers annual flood damages attributable to the Pearl River of approximately \$12 million. The flood of record occurred in 1979 causing \$440 million in damages in today's dollars.

**Issues:** The Rankin-Hinds Pearl River Flood and Drainage Control District (RHPRFDCD), non-Federal sponsor for the project, has recently indicated they plan to pursue the project under Section 211 of WRDA 1996 with a third party (Pearl River Vision Foundation) conducting the study for them. RHPRFDCD confirmed their intent to pursue studies of a one-lake plan under Section 211 in a meeting with the Vicksburg District on 25 August 2011 and by letter dated 12 September 2011. Under Section 211, the non-Federal sponsor must reimburse the Corps for any technical assistance provided. A Memorandum of Agreement between the Corps and the RHPRFDCD was signed on 19 July 2012.

**Importance:** Jackson, MS, is the primary regional economic center in the state.

**Risk:** A major flood could cause catastrophic damage to the area and result in millions of dollars of damages and possible loss of life.

**Consequence:** Under this authority, the sponsor conducts the study, constructs the project, and seeks reimbursement for the Federal share of the project after project construction. The sponsor assumes all risk for the project, and there is no guarantee of reimbursement.



Pearl River Basin  
Jackson Metro Area

**Activities for FY 12:** All existing funding was utilized in FY12 to develop and execute the Section 211 Memorandum of Agreement (MOA). Any technical assistance from the Corps in FY 13 will be on a cost-reimbursable basis from RHPRFDCD per the MOA.

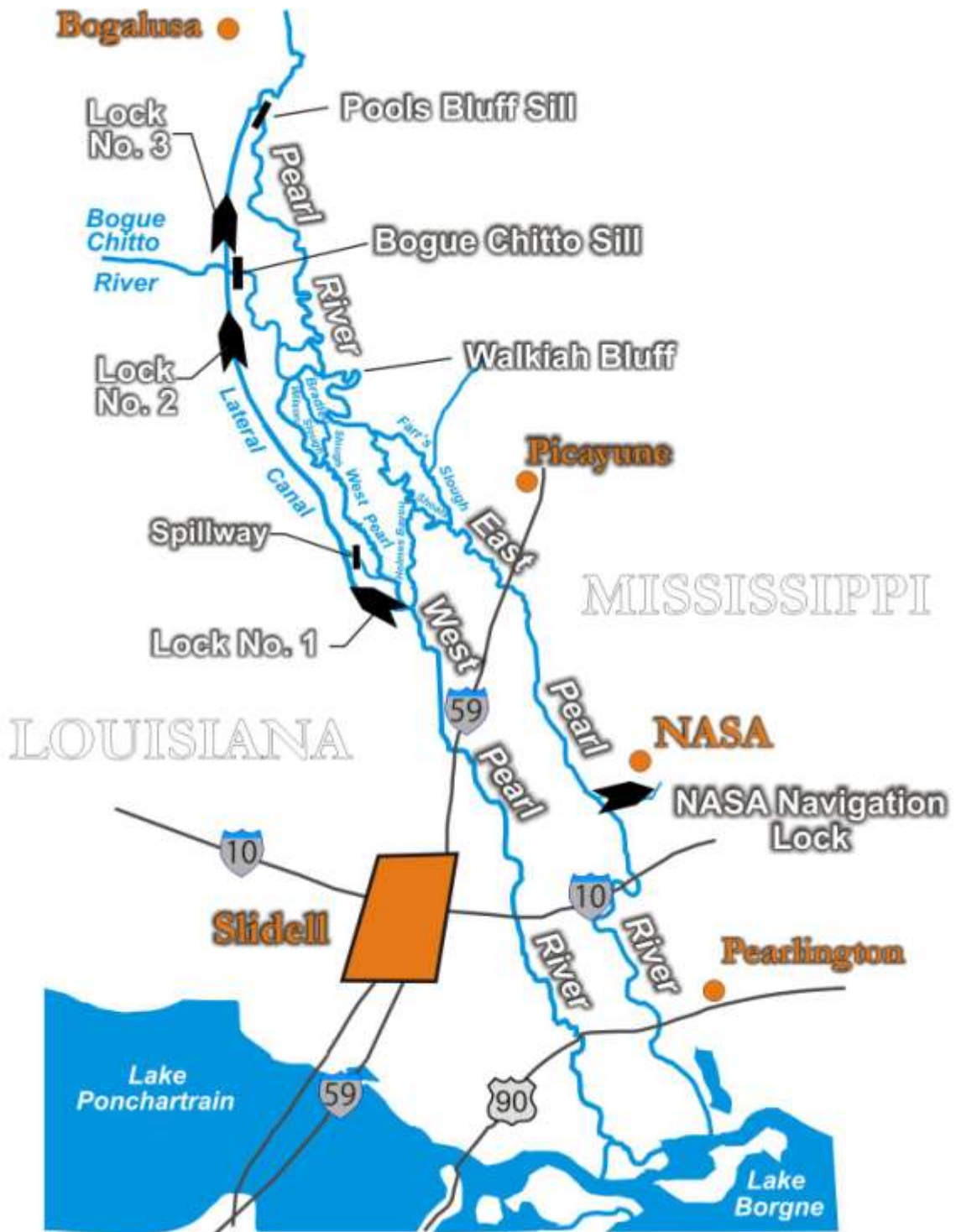
**Acquisition Strategy:** N/A

**Amount That Could Be Used in FY 13:** None.

**Project Sponsor/Customer:** Rankin-Hinds Pearl River Flood and Drainage Control District

**Congressional Interest:** House: Thompson (MS-2), Harper (MS-3); Senate: Cochran and Wicker (MS).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 11	FY 12 Allocation	FY 13 Budget	FY 13 Total Capability
Feasibility	N/A	N/A	N/A	N/A	N/A



West Pearl River Navigation, LA and MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### West Pearl River Navigation, LA and MS

Section 216, FCA 1970

#### Investigations (NAV)

**Location:** The West Pearl River Navigation project is located in southeast Louisiana and south Mississippi.

**Description:** The project was authorized by the Rivers and Harbor Act of 1935. The project, which began in 1938 and was completed in 1956, was designed to provide a minimum depth of 7 feet for navigation from the mouth of the West Pearl River to the vicinity of Bogalusa, LA, a distance of approximately 58 river miles. The project is divided into two open river sections and an approximate 20-mile canal section that includes three locks. Sills across the Bogue Chitto River, the Pearl River, and an unnamed creek maintain navigable depths in the canal section. This study is directed at deauthorization and disposal of the project.

**Issues:** The Pearl River Navigation project has exceeded its 50-year project life and has no commercial traffic. Efforts to reopen the waterway by the Vicksburg District in the mid-1980s to early 1990s by performing needed maintenance dredging were opposed by noncommercial groups. Maintenance dredging was last performed in 1988 and 1989. The last recorded barge movements occurred in 1991. In 1995, environmental litigation seeking declaratory and injunctive relief was filed, and the Corps was enjoined from dredging. In 1995, Congress officially placed the project in "caretaker" status by directing the limited project funds be used for maintenance of caretaker status. The project is in an unmanned caretaker status at this time. An Initial Appraisal Report was prepared recommending deauthorization of the project.

**Importance:** Funds have been requested for a New Start reconnaissance study directed at deauthorization and disposal of the project.

**Risk:** Recent engineering assessments completed for the lock facilities indicated that the sheet pile lock walls are rapidly corroding.

**Consequence:** Locks are deteriorating and are potentially unsafe.



**Amount That Could Be Used in FY 13:** Funds in the amount of \$100,000 could be used to complete a reconnaissance study directed at deauthorization and disposal of the project.

**Project Sponsor/Customer:** N/A

**Congressional Interest:** Senate: Landrieu (LA) and Cochran (MS); House: Palazzo (MS-04).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Reconnaissance	\$100,000	\$0	\$0	\$100,000





# Construction

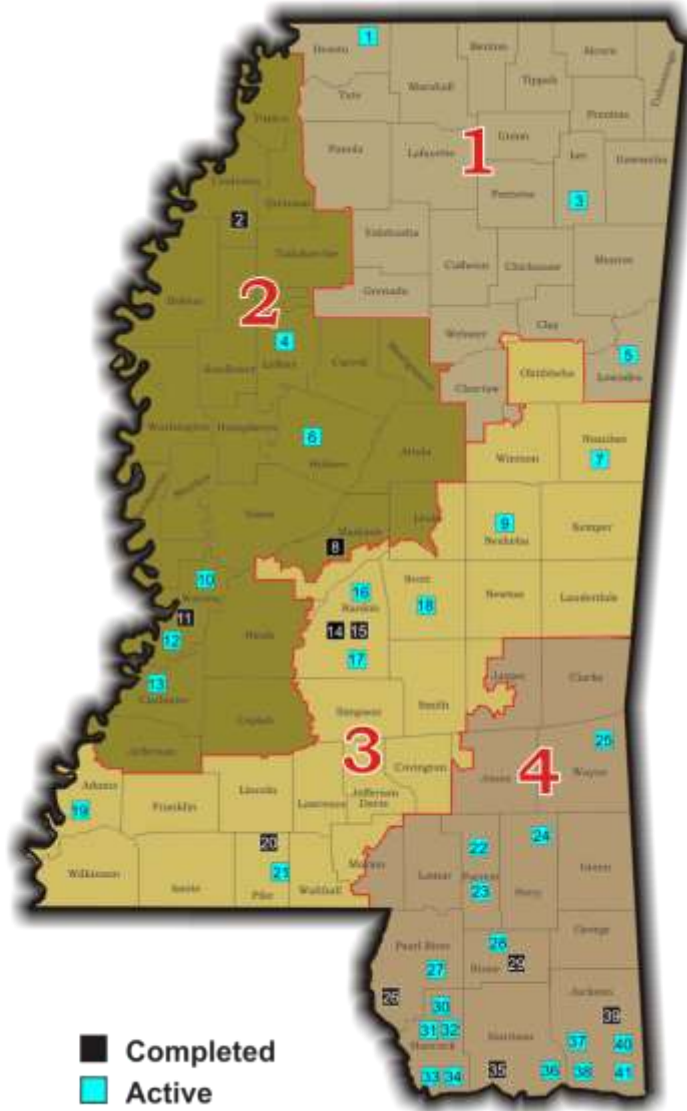
# Construction

# Construction

The main objective of a construction program is to complete authorized and appropriated projects as economically and quickly as practicable within program constraints and consistent with national priorities.

Under the provisions of a cost-shared project, prior to initiation of construction, the non-Federal sponsor and the government enter into a Project Partnership Agreement (PPA). The PPA describes all of the requirements and responsibilities relating to construction of the project including items of local cooperation required from the non-Federal sponsor.

- 1 Olive Branch
- 2 Coahoma County
- 3 Tupelo
- 4 Greenwood
- 5 Columbus
- 6 Cruger
- 7 Macon
- 8 Madison County
- 9 Philadelphia
- 10 Culkin
- 11 Vicksburg
- 12 Vicksburg
- 13 Port Gibson
- 14 Richland
- 15 West Rankin
- 16 Pearl River Valley
- 17 West Rankin
- 18 Forest
- 19 Natchez
- 20 McComb
- 21 Summit
- 22 Brooklyn
- 23 Hattiesburg
- 24 Richton
- 25 Hiwatee
- 26 Picayune
- 27 Pearl River County
- 28 Wiggins
- 29 MS Gulf Coast
- 30 Pearlington
- 31 Waveland
- 32 Waveland
- 33 Waveland
- 34 Waveland
- 35 Gulfport
- 36 Biloxi
- 37 Ocean Springs
- 38 Jackson County
- 39 Helena
- 40 Moss Point
- 41 Pascagoula



Brooklyn



Pascagoula



Philadelphia



Richton



Columbus

592 Projects, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Mississippi Environmental Infrastructure, MS (Section 592)

Sec 592, WRDA 99; Sec 120, E&WDAA 2004; Sec 101, CAA 2005; Sec 5097, WRDA 07;  
Sec 110, E&WDAA 2010

## Project Fact Sheet

### Construction (WS)

**Location:** Projects are located in multiple towns, cities, and municipalities throughout the State of Mississippi.

**Description:** The Mississippi (Section 592) project provides environmental infrastructure assistance to communities throughout the State of Mississippi. This includes project design and construction assistance for wastewater treatment and related facilities, combined sewer overflows, water supply and storage and related facilities, environmental restoration, and surface water resource protection and development.

**Issues:** The Section 592 program provides communities, associations, and municipalities in the State of Mississippi with the much needed funding to upgrade and replace environmental infrastructure systems listed under the above program description.

**Importance:** The 592 program is a 75/25 cost share, reimbursed to the sponsor. As part of the program, the Vicksburg District provides limited design review, National Environmental Policy Act compliance, construction inspection, and invoice processing for reimbursements. These costs, while a part of the total project costs, are not covered in the obligated amounts for construction.

**Risk:** Without the assistance of the Section 592 program the majority of the towns, cities, and municipalities will remain noncompliant and in violation of both state and Federal laws concerning environmental infrastructure.

**Consequence:** A future without the Section 592 program jeopardizes the safety and health of Mississippi's fragile clean water supply, storage, wastewater treatment, and other environmental issues.

#### 592 Projects

- Completed
- Active
- Adams County
- Alcorn County
- Amite County
- Attala County
- Calhoun County
- Carroll County
- Choctaw County
- Clarke County
- Clay County
- Cleveland County
- Coffee County
- Coahoma County
- Covington County
- De Kalb County
- DeSoto County
- Franklin County
- Fulton County
- George County
- Hancock County
- Harrison County
- Hinds County
- Holmes County
- Humphreys County
- Itawamba County
- Jackson County
- Jasper County
- Jefferson County
- Jones County
- Kemper County
- Leflore County
- Lincoln County
- Lumbard County
- Madison County
- Marion County
- Marshall County
- Meridian County
- Miller County
- Mississippi County
- Monroe County
- Montgomery County
- Morgan County
- Neshoba County
- Newton County
- Noxubee County
- Okefenokee County
- Owsen County
- Pearl River County
- Perry County
- Pike County
- Polk County
- Pontchartrain County
- Prentiss County
- Quitman County
- Rankin County
- Ripley County
- Scott County
- Shelby County
- Simpson County
- Smith County
- Spalding County
- Stark County
- Stone County
- Sullivan County
- Tarrant County
- Taylor County
- Tippah County
- Tishomingo County
- Union County
- Van Dyke County
- Warren County
- Washington County
- Wayne County
- Webster County
- Wilcox County
- Winthrop County
- Yazoo County



**Activities for FY 13:** Carryover funds are being used for management in support of ongoing projects. Funds of \$11,000,000 could be used to fully fund four new projects.

**Acquisition Strategy:** None.

**Project Sponsor/Customer:** Multiple

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Nunnelee (MS-1), Thompson (MS-2), Harper (MS-3), Palazzo (MS-4).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Construction	\$200,000,000	\$120,970,000	\$0	\$11,000,000

Section 592 Program								
ARRA Projects	County	Congressional	Total Cost (\$000)	Total Non-Federal Cost (\$000)	Total Federal Cost (\$000)	PCAPPA Executed/ Anticipated	Scheduled Completion	Status
<b>Completed Projects</b>								
Cochran County, City of Clarkdale sewer and water extension and sewer rehabilitation	Cochran	Thompson	\$6,491.7	\$2,358.0	\$7,073.8	04-Nov-04 15-Jul-10	FY 12	
Gulfport, City of design/installation of water supply system improvement	Harrison	Palazzo	\$5,200.0	\$1,300.0	\$3,900.0	18-Aug-03	FY08 (A)	
Helena, City of design/installation of sewer system and water supply system	Jackson	Palazzo	\$3,700.0	\$925.0	\$2,775.0	18-Aug-03	FY08 (A)	
Madison County Wastewater Authority development of sewage master plan for wastewater needs	Madison	Thompson	\$17,747.3	\$4,436.8	\$13,310.5	30-Sep-03	FY 10 (A)	
McCurtain, City of surface water resource protection improvements	Pike	Harper	\$2,191.8	\$548.0	\$1,643.8	20-Apr-05	FY 12	
Miss Gulf Coast Community College, Perkinston, MS replace water, sewer, storm drainage, and septic systems	Stone	Palazzo	\$3,201.0	\$800.2	\$2,400.8	29-Jul-04	FY08 (A)	
Pocahontas, City of upgrade existing sewage treatment plant	Pontchartraine	Palazzo	\$754.2	\$191.0	\$573.2	03-Feb-03	FY 09 (A)	
Richland, City of improve the water system	Rainier	Harper	\$1,810.7	\$452.7	\$1,358.0	20-Apr-05	FY 10 (A)	
Vicksburg, City of installation of new water wells	Warren	Thompson	\$2,776.3	\$696.1	\$1,707.2	08-Sep-03	FY 09 (A)	
West Rankin Utility Authority wastewater sewage treatment	Rainier	Harper	\$4,080.0	\$1,020.0	\$3,060.0	30-Jan-05	FY 10 (A)	
<b>Physically Complete Projects</b>								
Philadelphia Utilities construct water storage tank, rehab water tank, rehab sewer system	Neshoba	Harper	\$4,369.8	\$1,067.4	\$3,302.2	20-Apr-05 20-May-10	Aug-13	Closed in Progress
Wiggins, City of sanitary sewer upgrade	Stone	Palazzo	\$1,810.8	\$452.7	\$1,358.1	20-Jun-05 25-Aug-08	Aug-13	Closed in Progress
<b>Active Projects</b>								
Blount, City of sewer expansion Phase 1 of Eagle Point/Woodmarket	Harrison	Palazzo	\$2,587.5	\$646.9	\$1,940.6	19-Jan-10	TBD	Design Underway
Brooklyn Utility Sewage District centralized wastewater system	Forrest	Palazzo	\$3,485.0	\$871.2	\$2,613.8	19-Aug-08	Aug-14	Const Ongoing
Columbus, City of surface water resource protection improvements	Lowndes	Nunnally	\$1,400.7	\$350.2	\$1,050.5	26-Jan-10	Mar-14	Design Underway
Cruger, Town of update water supply	Holmes	Thompson	\$618.0	\$154.7	\$463.3	25-Apr-05	Nov-13	Const Ongoing
Culkin Water District improvements to the water system	Warren	Thompson	\$1,061.0	\$260.3	\$1,170.7	20-Apr-05 10-Sep-08	Jan-14	Design Def P&S completed
Forrest, City of sewer system rehabilitation	Scott	Harper	\$7,882.6	\$1,970.6	\$5,912.0	26-Apr-05 01-Dec-08 22-Apr-11	Sep-14	Const Ongoing
Greenwood, City of 24-inch sewer force main replacement	Leflore	Thompson	\$2,368.7	\$597.2	\$1,791.5	26-Jan-10	Jul-13	Const Ongoing
Hattiesburg, City of design and installation of sewer system improvements	Forrest	Palazzo	\$5,191.6	\$1,297.9	\$3,893.7	17-Apr-08	Dec-13	Const Ongoing

ARRA Projects Project Name	County	Congressional	Total Cost (\$000)	Total Non-Federal Cost (\$000)	Total Federal Cost (\$000)	PCA/PPA Executed/ Amended	Scheduled Completion	Status
Hwansee Water Association, Inc. water system improvements	Wayne	Palazzo	\$1,101.0	\$275.2	\$825.8	22-Sep-10	Dec-14	Design Underway
Jackson County Utility Authority wastewater collection and transmission system	Jackson	Palazzo	\$7,941.5	\$1,985.4	\$5,956.1	24-Nov-09 24-Aug-10	Aug-14	Design Underway
Macon, City of wastewater treatment system replace/improve	Newton	Harper	\$3,132.4	\$783.1	\$2,349.3	26-Mar-08 23-Sep-09	May-14	Design Underway
Miss Port, City of sewer infrastructure rehabilitation and repair	Jackson	Palazzo	\$4,070.0	\$1,142.5	\$3,427.5	25-Mar-10	TBD	Design Underway
Patchee, City of surface water resource improvements	Adams	Harper	\$12,463.1	\$3,113.3	\$9,349.8	20-Apr-08 25-Jun-10	Mar-14	Consist. Ongoing
Ocean Springs, City of sewer system rehabilitation	Jackson	Palazzo	\$4,045.0	\$1,011.2	\$3,033.8	22-Sep-10	Apr-14	Consist. Ongoing
Olive Branch, City of design/construct interceptor, sewer rehabilitation	DeSoto	Nunnelee	\$14,649.9	\$3,662.5	\$10,987.4	06-Dec-04	Aug-13	Closing out
Pascagoula, City of improvements to municipal sewer system	Jackson	Palazzo	\$2,120.0	\$530.3	\$1,589.7	26-Sep-09	Mar-14	Closing out
Pearl River County improvements to county WWTF at Millert	Pearl River	Palazzo	\$620.6	\$230.2	\$390.4	19-Jan-10	Apr-14	Design Underway
Pearl River Valley Water Supply District wastewater system improvements	Rankin	Harper	\$5,965.1	\$1,488.8	\$4,476.3	10-Sep-10	TBD	Design Underway
Pearlington, Community of water well installation	Hancock	Palazzo	\$1,899.0	\$474.8	\$1,424.2	11-Mar-10	TBD	RFI's issues w/Eng
Port Gibson, City of water distribution system improvements	Cadotte	Thompson	\$1,345.5	\$336.8	\$1,008.7	16-Mar-10	Jul-14	Design Underway
Renton, Town of design/installation of sewer system extension and water well	Perry	Palazzo	\$2,025.1	\$506.3	\$1,518.8	3-Sep-09	Dec-13	Consist. Ongoing
Summit, Town of sewer system improvements	Pike	Harper	\$405.5	\$101.4	\$304.1	20-Apr-05 14-Dec-09	TBD	Design Underway
Tupelo, City of surface water resource improvements	Lee	Nunnelee	\$6,293.7	\$2,073.4	\$4,220.3	12-May-06 23-Sep-09	TBD	Design Underway
Vicksburg, City of #2 install new water line	Warren	Thompson	\$3,271.5	\$817.9	\$2,453.6	17-Sep-10	Jul-18	Design Underway
Waveland, East Jeff Davis Avenue sewer system improvements	Hancock	Palazzo	\$226.0	\$206.5	\$19.5	25-Mar-10 22-Apr-11	Aug-14	Design Underway
Waveland, West Jeff Davis Avenue sewer system improvements	Hancock	Palazzo	\$1,008.1	\$262.5	\$745.6	22-Apr-11	Aug-14	Design Underway
Waveland, Outfide Street sewer system improvements	Hancock	Palazzo	\$782.1	\$195.5	\$586.6	22-Apr-11	Aug-14	Design Underway

ARRA Projects Project Name	County	Congressional	Total Cost (\$000)	Total Non-Federal Cost (\$000)	Total Federal Cost (\$000)	PCA/PPA Executed/ Amended	Scheduled Completion	Status
Waveland, Connector sewer system improvements	Hancock	Palazzo	\$1,087.2	\$274.3	\$812.9	22-Apr-11	Aug-14	Design Underway
West Rankin Utility Authority #2 wastewater force main replacement	Rankin	Harper	\$6,625.0	\$2,206.3	\$4,418.7	25-Feb-10	Aug-14	Consist. Ongoing
<b>Total</b>			<b>\$156,756.6</b>	<b>\$36,679.1</b>	<b>\$119,077.6</b>			

# The 8 Authorities of the Continuing Authorities Program (CAP)

## Section 14

### **Emergency Streambank & Shoreline Protection - Flood Control Act of 1946 as amended by WRDA 1996**

This authority is to prevent erosion damages to highways, bridge approaches, public works, and other nonprofit public facilities by the emergency construction or repair of streambank and shoreline erosion protection. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of \$1.5 million per project and a national program limit of \$15 million.

## Section 107

### **Small Navigation Projects - River and Harbor Act of 1960**

This authority provides improvement to navigation including dredging of channels, widening of turning basins, and construction of navigation aids. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 80% Federal and 20% non-Federal with a Federal funding limit of \$7 million per project and a national program limit of \$35 million.

## Section 205

### **Small Flood Control Projects - Flood Control Act of 1948 as amended by WRDA 1999**

This authority for local protection from flooding by the construction or improvement of flood control works such as levees, channels, and dams. Nonstructural alternatives are also considered. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of \$7 million per project and a national program limit of \$55 million.

## Section 206

### **Aquatic Ecosystem Restoration - Water Resources Development Act of 1996, as amended by WRDA 1996**

This authority provides for restoration of degraded aquatic ecosystems. A restoration project is adopted for construction only after investigation shows that the restoration will improve the environment, and/or elements and features of an estuary is in the public interest, and is cost effective. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of \$5 million per project.

### **Section 1135**

#### **Project Modification for Improvements to the Environment - Water Resources Development Act of 1986 as amended by WRDA 1996 and WRDA 1999**

This authority provides for ecosystem restoration through modification to Corps structures or operation of Corps structures or implementation of restoration features when the construction of Corps projects has contributed to degradation of the quality of the environment. These are two-phase projects: Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 75% Federal and 25% non-Federal with a Federal funding limit of \$5 million per project and a national program limit of \$40 million.

### **Section 208**

#### **Snagging and Clearing for Flood Control- Flood Control Act of 1954**

This authority provides improvements for flood control by removing accumulated snags and other debris, and clearing and straightening of the channels in streams in the interest of flood control. Study cost for the first \$100,000 is 100% Federal with any amount over \$100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a \$500,000 Federal limit. This Federal cost limitation includes all project-related costs for feasibility studies, planning, engineering, construction, supervision, and administration.

### **Section 204**

#### **Ecosystem Restoration Projects in Connection with Dredging Water Resources Development Act of 1992, as amended**

This authority provides for protection, restoration, and creation of aquatic and wetland habitats in connection with construction and maintenance dredging of an authorized project. Study cost for the first \$100,000 are 100% Federal with any amount over \$100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 75% Federal and 25% non-Federal.

### **Section 111**

#### **Mitigation of Shore Damages- Water Resources Development Act of 1968, as amended**

This authority provides for the prevention or mitigation of erosion damages to public or privately owned shores along the coastline of the United States when these damages are a result of a Federal navigation project. This authority cannot be used for shore damages caused by river bank erosion or vessel-generated wave wash.

It is not intended to restore shorelines to historic dimensions, but only to reduce erosion to the level that would have existed without the construction of a Federal navigation project. Cost sharing may not be required for this program. If the Federal cost limitation is exceeded, specific Congressional authorization is required.

Study cost for first \$100,000 is 100% Federal with any amount over \$100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of \$5 million per project.



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet McKinney Bayou, Tunica County, MS

Section 205 of the Flood Control Act of 1948 (CAP)

### Construction (CAP) (FRM)

**Location:** The project is located in northeast Tunica County, Mississippi, and includes the entire McKinney Bayou Watershed.

**Description:** This area functions as a flood control and water management system for a 43-square-mile basin. Significant changes within the watershed due to extreme pressures caused by improved agricultural technology and tremendous urban growth have contributed to frequent flooding resulting in both agricultural and structural damages.

**Issues:** Flooding has become so frequent and at such critical times that water resource improvements in the watershed are needed. The prolonged periods of inundation, in addition to causing infrastructure and agricultural damages, are causing environmental damages. Future plans and projections for the McKinney Bayou watershed forecast continued growth for this study area.

**Importance:** The prolonged periods of inundation, in addition to causing infrastructure and agricultural damages, are causing environmental damages.

**Risk:** There are approximately 10,150 acres currently flooded by the existing 100-year flood event.

**Consequence:** Without additional funding, design efforts for flood risk management will cease and continued flooding in the area can be expected.



McKinney Bayou

**Activities for FY 13:** Funds are being used for design. With additional funding in FY 13, design could be completed and a construction contract awarded in FY 14.

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Tunica County Soil and Water Conservation District

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Allocation	FY 13 Total Capability
Design & Implementation	\$4,093,000	\$663,000	\$200,000	\$500,000



# **Operation and Maintenance**

# **Operations and Maintenance**



# **Operation & Maintenance (O&M)**

The Operation and Maintenance program focuses on the need to preserve the existing Civil Works Infrastructure such as locks, dams, navigation channels, recreation facilities and provide adequate levels of service.



Rosedale Harbor, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet Rosedale Harbor, MS

River and Harbor Act of 1960, Section 107

### Operation and Maintenance (NAV)

**Location:** Rosedale Harbor is a slack-water, shallow draft harbor located along the Mississippi River in Bolivar County, MS.

**Description:** The harbor channel is 2.7 miles long by 150 feet wide and the turning basin is 1,000 feet long and 400 feet wide. Both the harbor channel and turning basin have a maintained minimum depth of 9 feet.

**Issues:** Depending on river stages, the harbor experiences low-water conditions starting in July and lasting through November of each year. Maintenance dredging allows this port to continue shipping during these stages.

**Importance:** The harbor provides a transportation need for water-oriented industries in Bolivar County, MS. It sustains approximately 325 jobs.

**Risk:** If dredging is not performed, this harbor will first begin to "light load" barges, in which barges will not be loaded to full capacity resulting in less efficient transportation. As the river continues to fall, there will not be enough water for the towboats to carry these barges to the river and the harbor will be required to close. Without maintenance dredging funds, this harbor will lose project dimensions during the busiest time of the year when crops are harvested and shipped.

**Consequence:** The loss of a dependable, reliable and safe harbor will have significant adverse impacts on the region due to the increased shipping costs by rail and trucks. Many small communities and farmers will be forced to seek other more costly means to move their products. Harbor employees along with the business located in the harbor would be laid off.



Rosedale Harbor

**Activities for FY 13:** Budgeted funds will be used for surveys. Additional funds of \$1,739,000 could be used for dredging.

**Acquisition Strategy:** None.

**Project Sponsor/Customer:** Rosedale-Bolivar County Port Commission

**Congressional Interest:** Senate: Cochran and Wicker;  
House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
O&M	\$11,000	\$1,750,000

**Claiborne  
County  
Port**



Claiborne County Port, MS



US Army Corps  
of Engineers  
Vicksburg District

# Project Fact Sheet Claiborne County Port, MS

River and Harbor Act of 1960, Section 107

## Operation and Maintenance (NAV)

**Location:** Claiborne County Port, located in Claiborne County, MS, is a slack-water, shallow draft port located along the Mississippi River.

**Description:** The entrance channel is 800 feet long by 150 feet wide and maintained to a minimum depth of 9 feet. The turning basin is 800 feet by 400 feet and maintained to a minimum depth of 9 feet.

**Issues:** Depending on river stages, the port experiences low-water conditions starting in July and lasting through November of each year. Maintenance dredging allows this port to continue shipping during these stages.

**Importance:** The port provides a transportation need for water-oriented industries in Claiborne County, MS.

**Risk:** If dredging is not performed, this port will first begin to "light load" barges, in which barges will not be loaded to full capacity resulting in less efficient transportation. As the river continues to fall, there will not be enough water for the towboats to carry these barges to the river and the port will be required to close. Without maintenance dredging funds, this port will lose project dimensions during the busiest time of the year when crops are harvested and shipped.

**Consequence:** The loss of a dependable, reliable and safe port will have significant adverse impacts on the region due to the increased shipping costs by rail and trucks. Many small communities and farmers will be forced to seek other more costly means to move their products. Port employees along with the business located in the harbor would be laid off. The port was closed for 214 days in 2012 due to low water. The port did not have the depth required for navigation from 30 May through 29 December 2012. Navigation was lost when the Vicksburg gauge was below 15 feet.



Claiborne County Port

**Activities for FY 13:** Budgeted funds will be used for surveys. Additional funds of \$74,000 could be used for dredging.

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Claiborne County Port Commission

**Congressional Interest:** Senate: Wicker and Cochran;  
House: Thompson (MS-2)

Phase	FY 13 Budget	FY 13 Total Capability
O&M	\$1,000	\$75,000



Pearl River, LA and MS



US Army Corps  
of Engineers  
Vicksburg District

## Project Fact Sheet Pearl River, LA and MS

River and Harbor Act of 1935, as modified by River and Harbor Act of 1966

### Operation and Maintenance (NAV)

**Location:** The Pearl River Navigation project is a navigation channel on the Pearl River that originally extended 58 miles from the mouth of the Pearl River to the mouth of Bogalusa Creek at Bogalusa, LA.

**Description:** The project consisted of three locks and three weirs that provided a channel with minimum depth of 7 feet and a minimum bottom width of 100 feet. The project was placed in a caretaker status in 1995 and has been maintained only for maintenance and safety needs.

**Issues:** The Pearl River Navigation project has exceeded its 50-year project life and has no commercial traffic. Efforts to reopen the waterway by the Vicksburg District in the mid-1980s to early 1990s by performing needed maintenance dredging were opposed by noncommercial groups. Maintenance dredging was last performed in 1988 and 1989. The last recorded barge movements occurred in 1991. In 1995, environmental litigation seeking declaratory and injunctive relief was filed, and the Corps was enjoined from dredging. In 1995, Congress officially placed the project in "caretaker" status by directing the limited project funds be used for maintenance of caretaker status. The project is in an unmanned caretaker status at this time. An Initial Appraisal Report was prepared recommending deauthorization of the project.

**Importance:** Funds have been requested for a New Start reconnaissance study directed at deauthorization and disposal of the project.

**Risk:** Recent engineering assessments completed for the lock facilities indicated that the sheet pile lock walls are rapidly corroding.

**Consequence:** Locks are deteriorating and are potentially unsafe.



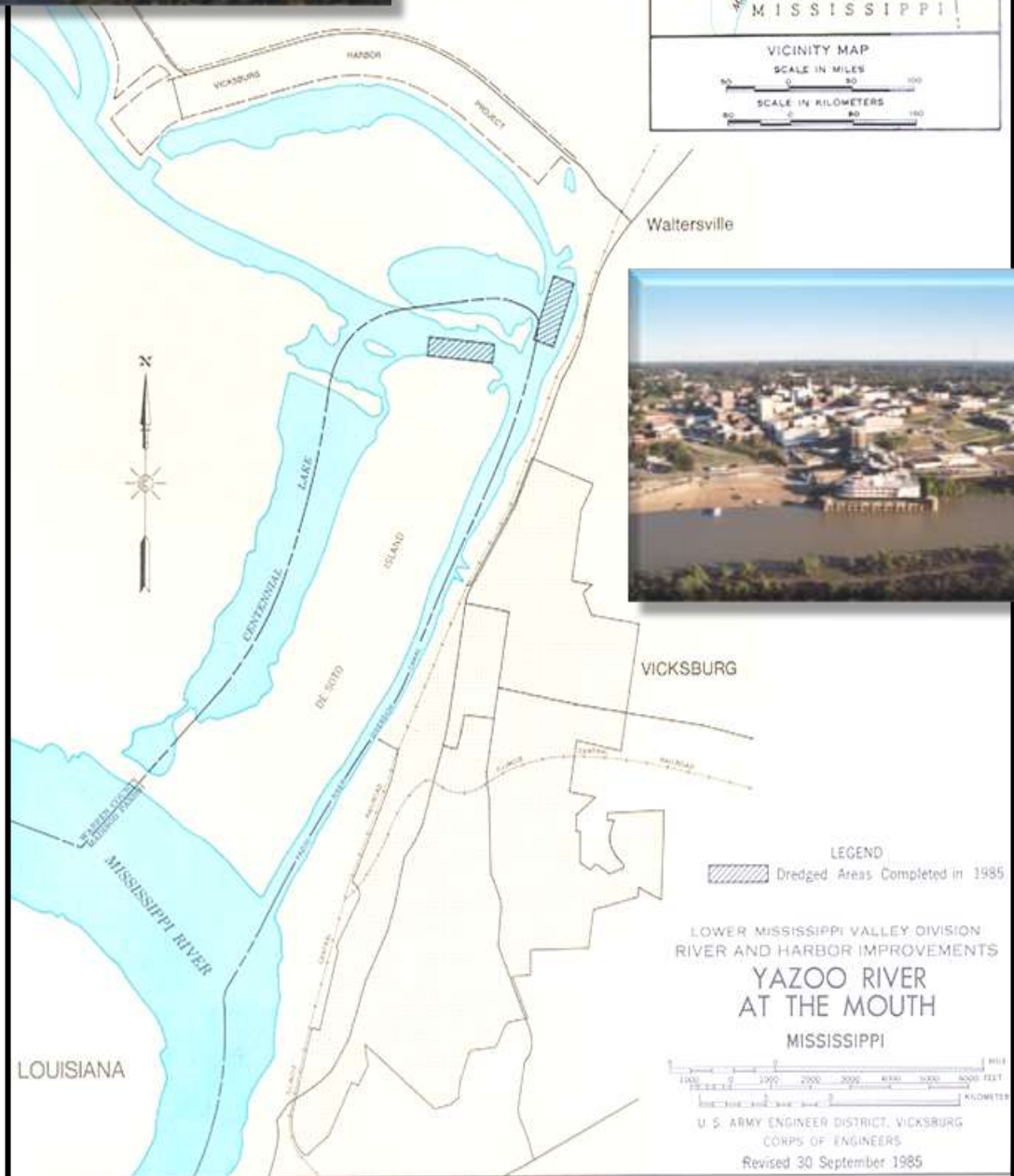
Lock 3

**Activities for FY 13:** Budgeted funds are being used to maintain project in a caretaker status. Supplemental funds are being used to mitigate the damage at Lock 2 that resulted from overtopping of the lock chamber after Hurricane Isaac.

**Acquisition Strategy:** None.

**Congressional Interest:** Senate: Landrieu and Vitter (LA); House: Palazzo (MS-4).

Phase	FY 13 Budget	FY 13 Total Capability
O&M	\$145,000	\$145,000



Mouth of the Yazoo River, MS



**US Army Corps  
of Engineers**  
Vicksburg District

# Project Fact Sheet

## Mouth of Yazoo River, MS

River and Harbor Act of 1960, Section 107

### Operation and Maintenance (NAV)

**Location:** Mouth of Yazoo River starts at the Mississippi River and continues for 9.3 miles to the junction of Old Mississippi River and Yazoo River at Vicksburg, Mississippi.

**Description:** The channel is 150 feet wide, and a minimum operating depth of 9 feet below the lowest water of record is maintained in the channel.

**Issues:** Without maintenance dredging, this entrance channel will lose project dimensions requiring the Yazoo River and the Vicksburg Harbor to be shut down during the busiest time of the year when crops are harvested and shipped.

**Importance:** The project's purpose is to provide access to the Yazoo River, and upper Vicksburg Harbor, and the Vicksburg Harbor.

**Risk:** Loss of project depths will have significant adverse impacts on the region due to increased shipping costs by rail and trucks. The Mat Sinking Unit and the dredge *Jadvin* anchor in the Vicksburg Harbor and their access to the Mississippi River during low-water stages could be impeded.

**Consequence:** Approximately 3,855 employees with payrolls over \$80 million could be affected if dredging is not performed. There are 24 businesses and industries located on the Mississippi River harbors.



**Activities for FY 13:** Budgeted funds will be used for surveys and minimal dredging. Additional funds of \$270,000 could be used for dredging.

**Acquisition Strategy:** None.

**Project Sponsor/Customer:** Vicksburg Port

**Congressional Interest:** Senate: Cochran and Wicker;  
House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
O&M	\$30,000	\$300,000



Yazoo River, MS



**US Army Corps  
of Engineers**  
Vicksburg District

# Project Fact Sheet Yazoo River, MS

Water Resources Development Act of 1986

## Operation and Maintenance (NAV)

**Location:** The Yazoo River provides navigation from Mouth of the Yazoo River, Vicksburg, MS, to Greenwood, MS.

**Description:** Clearing and snagging of the channel provides a clear channel to Yazoo City, MS. The project depth of 9 feet is authorized but not dredged, to Greenwood, a distance of over 158 miles. All work is done at or near the Vicksburg Harbor just above the Mouth of the Yazoo River.

**Issues:** Without maintenance funds, the project would become hazardous to navigation due to log jams and snags.

**Importance:** The project meets a transportation need of water-oriented industry from Greenwood to Vicksburg.

**Risk:** The river services many small communities and farmers in the Mississippi Delta.

**Consequence:** Approximately 3,855 employees with payrolls over \$80 million could be affected if dredging is not performed. There are 24 businesses and industries located on the Mississippi River harbors.



**Yazoo River**

**Activities for FY 13:** Budgeted funds will be used for clearing and snagging. Additional funds of \$128,000 could be used for clearing and snagging.

**Acquisition Strategy:** None.

**Project Sponsor/Customer:** Vicksburg Port

**Congressional Interest:** Senate: Cochran and Wicker;  
House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
O&M	\$26,000	\$154,000





# **Mississippi River & Tributaries Investigations**

# **Mississippi River & Tributaries Investigations**

# **MR&T Investigations**

The major objective of the MR&T Investigations program is to study projects that provide solutions to water resource problems for the area within the MR&T authorized project, generally from the area along the Mississippi River from Cairo, IL, to the Gulf of Mexico. The Corps undertakes studies in response to directives (authorizations) from Congress. Congressional authorizations are contained in public law and in resolutions of either the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee.

Most studies are conducted in two phases—reconnaissance and feasibility. The reconnaissance phase is fully funded by the Federal Government and is usually completed in 12 months. The purpose is to define the problem, opportunities, and identifying potential solutions. It also determines whether or not planning should proceed into the feasibility phase based on a preliminary appraisal of the Federal interest, cost, benefits, and environmental impacts of the identified potential solution. The phase is completed upon the signing of the Feasibility Cost-Sharing Agreement (FCSA) by the Corps and a project sponsor.

The feasibility phase can take up to 3 years to complete and is cost shared equally between the Federal Government and the non-Federal sponsor. The report results in recommendations to Congress for or against Federal participation in solutions to the water resource problem and opportunities identified in the study. A recommendation for Federal participation identifies a recommended plan/project, generally for construction authorization and funding.

The Preconstruction, Engineering and Design Studies (PED) phase of project development encompasses all planning and engineering necessary for project construction, after release of the report and Division Engineer's public notice on a favorable study. Preparation of design memorandums and plans and specifications will be cost shared in accordance with the cost sharing required for project construction.

# Mississippi River and Tributaries Project Area



**Collection and Study of Basic Data,  
Arkansas, Louisiana, and Mississippi**



US Army Corps  
of Engineers  
Vicksburg District

# Project Fact Sheet

## Collection and Study of Basic Data, AR, LA, MS

Flood Control Acts of 1928, Sections 1, 2, 3, and 10

### Mississippi River and Tributaries, Investigations (FRM)

**Location:** The Collection and Study of Basic Data project is located throughout the Vicksburg District in AR, LA, and MS.

**Description:** Data collected consist of information on stream flow, sediments and nutrients, rainfall, floods, and other items of related hydrologic nature.

**Issues:** Data collected under this activity are for authorized flood control projects for which funds have been appropriated in the Memphis, Vicksburg, and New Orleans Districts. Data are used by numerous agencies and the public to determine when flooding will occur and to plan for any evacuations. In addition, the Environmental Protection Agency and state environmental quality agencies are now recognizing water quality as a critical element in environmental protection planning and construction. These data are vital to show projects are in conformance with state and Federal laws.

**Importance:** Data collection is essential in the planning, design, and construction and O&M of authorized flood control projects, especially significant after the Flood of 2011.

**Risk:** Without adequate funding, the District would lose the ability to make accurate flood predictions.

**Consequence:** If not funded, essential hydraulic and hydrologic and water quality data would not be collected and therefore data would not be available to accurately predict future flood and drought conditions on major rivers within the District.

Mississippi River  
and  
Tributaries  
Project Area



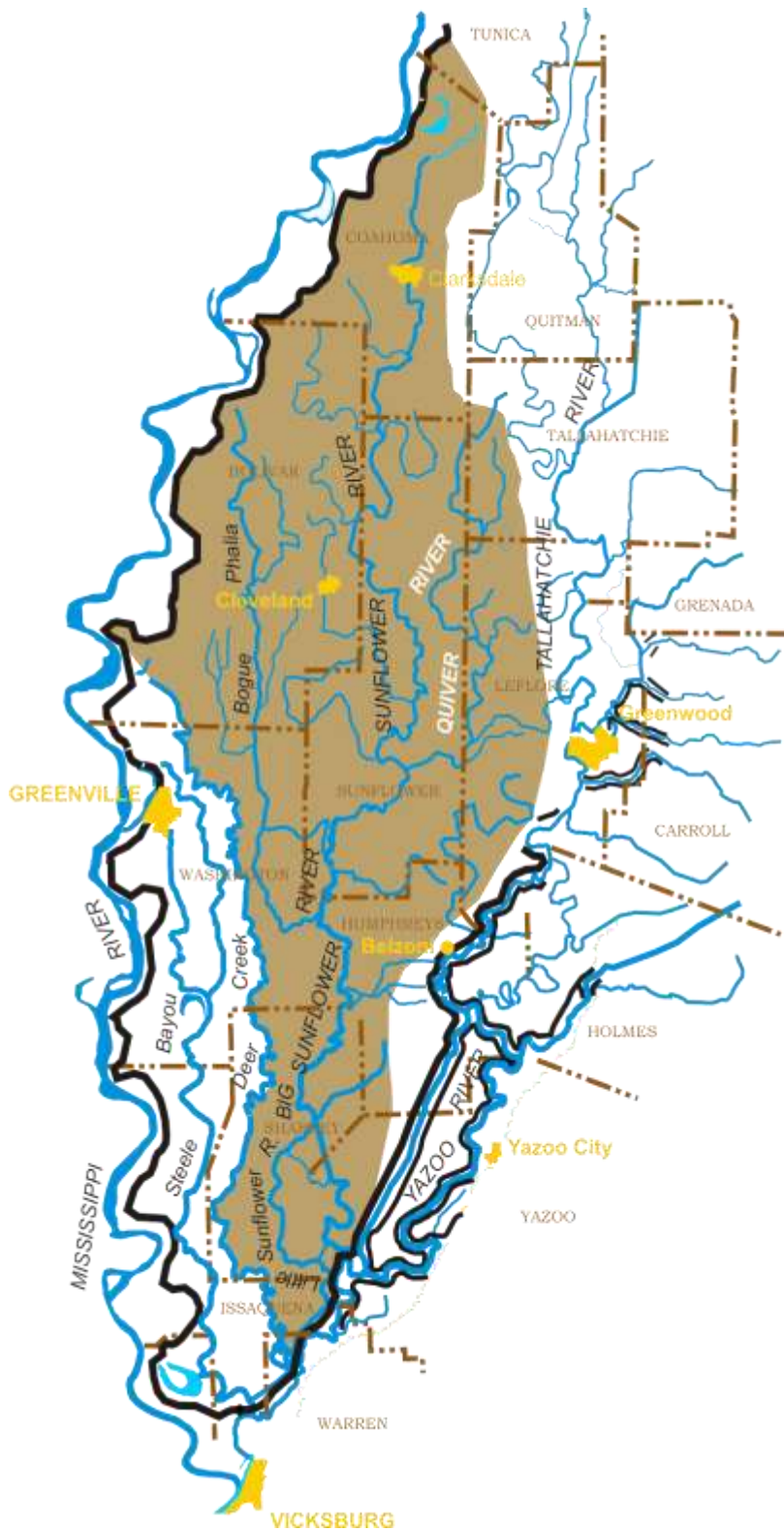
**Activities for FY 13:** Budgeted funds are being used to collect essential basic data used in planning and design of authorized flood control projects. Additional funds of \$2,080,000 could be used to fully fund collection of essential hydrologic data used in flood predictions, planning and design of authorized flood control projects across the District (\$400,000), aquatic and water quality monitoring within the Vicksburg District (\$480,000), and continue LIDAR mapping in the Vicksburg District (\$1,200,000).

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Mississippi Levee Board

**Congressional Interest:** Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), Scalise (LA-1), Fleming (LA-4), Alexander (LA-5), Nunnelee (MS-1), and Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Feasibility	N/A	N/A	\$170,000	\$2,250,000



Big Sunflower River Watershed Study, MS  
(Quiver River)



US Army Corps  
of Engineers  
Vicksburg District

## Project Fact Sheet Big Sunflower River Watershed Study, MS (Quiver River)

SR, 29 June 1973

### Mississippi River and Tributaries, Investigations (FRM)

**Location:** The study area is part of the Big Sunflower River and Yazoo River Watersheds, in the Mississippi Delta.

**Description:** The Quiver River originates in Tallahatchie County and meanders more than 60 miles south before its confluence with the Big Sunflower River, just north of U.S. Highway 82 in Sunflower County. Major streams in the study area include the Tallahatchie River, Quiver River, Sandy Bayou, Black Bayou, and Parks Bayou. The predominant emphasis of the study is the restoration of the degraded aquatic ecosystems in the study area.

**Issues:** The Quiver River area offers unique opportunities for making improvements to aquatic, riparian, and terrestrial resources in the region. The streams in the area are prone to extremely low-water levels and little or no flow during drought and low-water periods. The overall health of the streams is viewed by the public as having a substantial impact on the wetland, aquatic, and terrestrial ecosystems in the vicinity. Additionally, low base flows pose a threat to human health and safety if there is insufficient water to dilute permitted effluent loadings during low-flow conditions.

**Importance:** Water quality concerns are impacting development in this economically depressed region. Industries are currently facing massive costs for treatment of discharges and/or fines due to the condition of the streams into which they discharge.

**Risk:** Poor water quality directly affects the ecosystem's ability to support aquatic habitat. Decreased food supplies and poor water quality could adversely impact other wildlife.

**Consequence:** Without funding, the feasibility study will be suspended in FY 14, thereby continuing degradation of the environment.



Degraded stream conditions in the Big Sunflower Watershed

**Activities for FY 13:** Funds are being used to continue feasibility study which will evaluate a range of alternatives and provide a plan for ecosystem restoration and related and compatible water quality, and water resource management measures.

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta (YMD) Joint Water Management District

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Allocation	FY 13 Total Capability
Feasibility	\$1,315,000	\$545,000	\$70,000	\$300,000



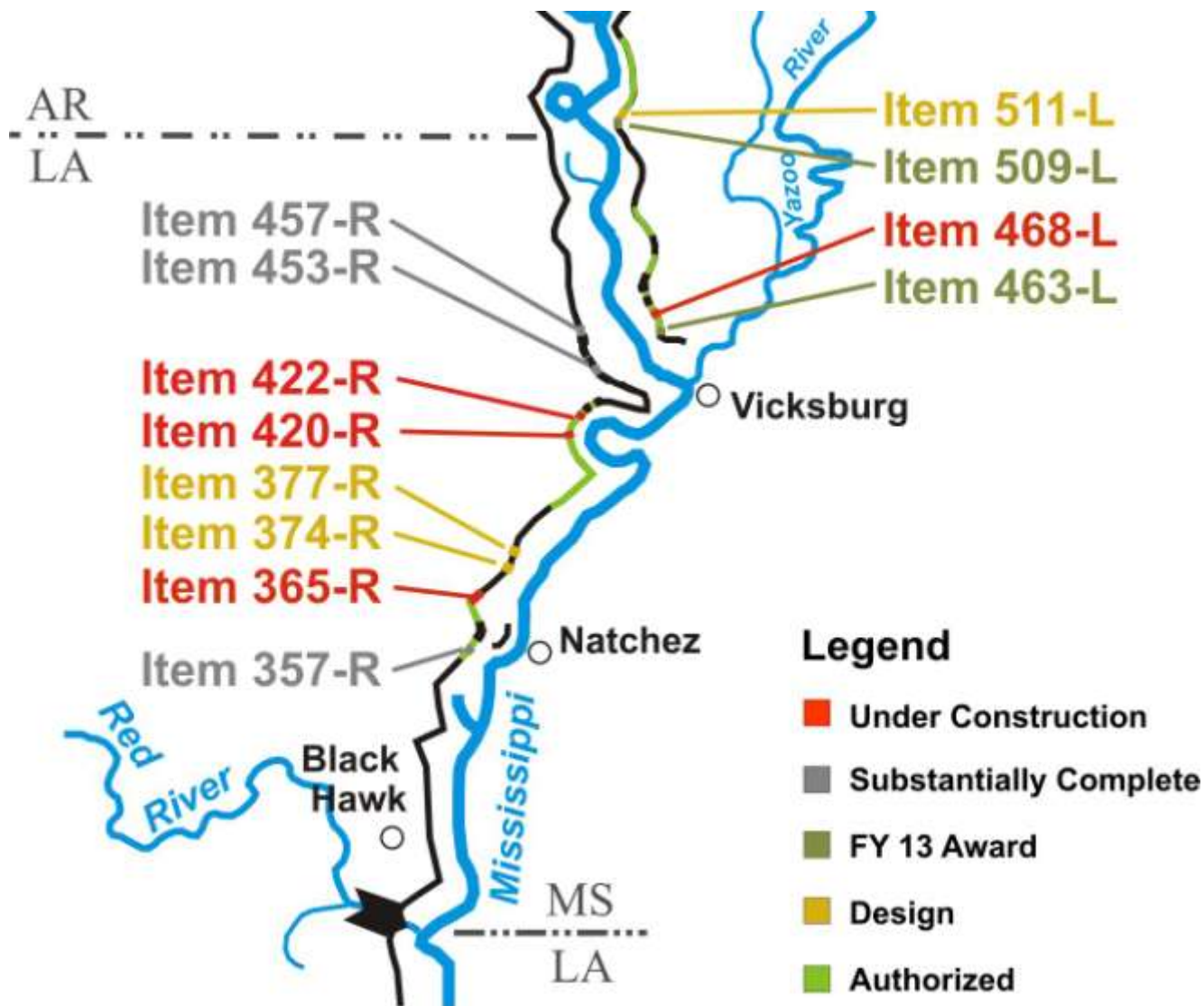


# **Mississippi River & Tributaries Construction**

# **Mississippi River & Tributaries Construction**

# **MR&T Construction**

The objective of the MR&T construction program is to construct and complete authorized and appropriated MR&T projects as economically and quickly as practicable within program constraints and consistent with current national priorities.



Mississippi River Levees, AR, LA, and MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Mississippi River Levees, AR, IL, KY, LA, MS, MO & TN

Flood Control Acts of 1928, 1936, 1939, 1941, 1944, 1946, 1950, 1954, 1962, 1965, 1968, River Basin  
Monetary Authorization Act of 1971, WRDA 1992, Sec 103; WRDA 2000, Section 508

### Mississippi River and Tributaries, Construction (FRM)

**Location:** The Mississippi River levee system on the west bank extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to Venice, Louisiana, and on the east bank from Hickman, Kentucky, to opposite Venice, Louisiana, except where interrupted by hills and tributary streams. Included in the system are the levees, which protect Mounds, Mound City and Cairo, Illinois, and the New Madrid Levee and Floodway.

**Description:** Improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project design flood.

**Issues:** There are currently 116 miles remaining of deficient levees within the Vicksburg District.

**Importance:** The Mississippi River Levees are designed to protect people, property, infrastructure, and the environment in the alluvial valley against the project design flood by confining flow to the channel between the levees and natural hill lines, except where it enters natural backwater areas or is diverted purposely into floodway areas.

**Risk:** Catastrophic damage is likely to occur if the system is below authorized level of protection.

**Consequence:** A breach in the levee could result in over 1 million acres inundated, towns and cities flooded, and lives lost. Commercial impacts include roads, agricultural and timber production. Farmland is at risk of flooding, resulting in devastation of primary economic engine of the region. Environmental losses of terrestrial habitat and wildlife would be significant.

**Activities for FY 13:** Budgeted funds of \$20,955,000 are being used for relocations, supervision and administration of ongoing construction, and to complete Items 365R, Vidalia-Morville, LA, and Item 468L, Magna Vista to Brunswick, MS; to continue Items 420R, Bayou Vidal to Elk Ridge, LA, and 422R, Reid Bedford-King, LA; and to award Item 463, Reid Bedford-King, and Item 509L, Lake Jackson-Palmetto. Additional funds of \$3,000,000 could be used to award Item 511L. Supplemental funding in the amount of \$22.3 million will be used to continue supervision and administration on those previously awarded items and to complete the designs and make award for all 19 of the

remaining items identified as a part of Operation Watershed Reset/Recovery.

**Acquisition Strategy:** Item 463 was awarded in October 2012. Item 509 is scheduled to be awarded in August 2013. These items are being funded with regular appropriated funds. Seven contracts are scheduled to be awarded in the fourth quarter using supplemental funds to repair those areas damaged by the 2011 flood.



Item 365-R Vidalia-Morville, LA

**Project Sponsor/Customer:** Mississippi Levee Board, Fifth Louisiana Levee Board, and Southeast Arkansas Levee District.

**Congressional Interest:** Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), Scalise (LA-01), Alexander (LA-5), Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY12	FY 13 Budget	FY13 Supplemental	FY 13 Total Capability (Regular)
Construction	\$1,067,100,000	\$637,978,000	\$20,955,000	\$22,265,000	\$23,955,000



**Lower Mississippi River Museum**



**US Army Corps  
of Engineers**  
Vicksburg District

## Mississippi River Levees, Lower Mississippi River Museum and Riverfront Interpretive Site

WRDA 1992, WRDA 2000, and E&W Development Appropriations Act 2006

### Mississippi River and Tributaries, Construction (FRM)

**Location:** The Lower Mississippi River Museum and Riverfront Interpretive Site (LMRM) is located at 901 Washington St. Vicksburg, Mississippi, 39180.

**Description:** The museum is a collaborative effort to provide visitors with a better understanding of the risks and benefits to living along the Lower Mississippi River. The museum features interior museum displays, an outdoor Mississippi River model, and displays onboard the MV MISSISSIPPI IV.

**Issues:** None.

**Importance:** The LMRM is one of the only Federal facilities that assists the Corps of Engineers in interpreting flood risk management to the general public. Visitors learn the importance of the MR&T system, comparing historic floods to future forecasts, river dynamics, and Corps history through a variety of interactive and engaging displays. The Vicksburg vicinity has provided positive support for the museum and feel it has already make an impact to the downtown area.

**Risk:** Future funding for LMRM Operation and Maintenance is unsecured and subject to District prioritization.

**Consequence:** If the LMRM is not operated and maintained, the museum will close. The city of Vicksburg and the surrounding area would suffer from economic hardship. The MV MISSISSIPPI IV, property, and items belonging to the Federal government would fall into disrepair.



**Activities for FY 12:** Funds were used to complete construction of the museum building and exhibits.

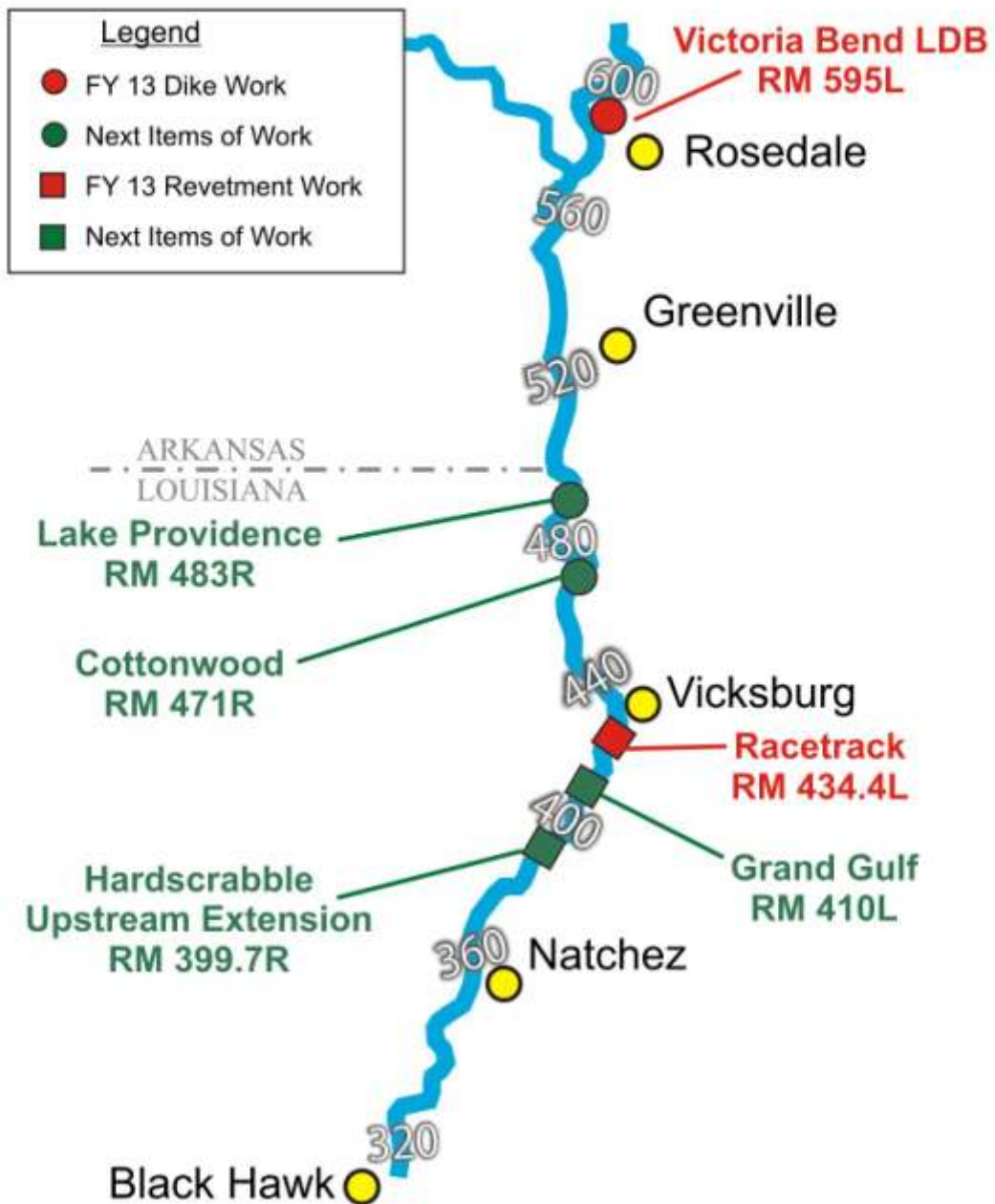
**Acquisition Strategy:** None.

**Amount That Could Be Used in FY 13:** Funds will be used to complete safety issues onsite.

**Project Sponsor/Customer:** None.

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12
Construction	\$26,000,000	\$26,000,000



Mississippi River Channel Improvement,  
Arkansas, Louisiana, and Mississippi



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet Mississippi River Channel Improvement, AR, LA, & MS

Flood Control Acts of 1928 (Section 1); 1936 (Section 1); 1938 (Section 4); 1941 (Section 3); 1944 (Section 10); 1962 (Section 203); 1965 (Section 201, 204); 1966 (Section 202, 203); and 1970 (Section 207)

### Mississippi River and Tributaries, Construction (FRM, NAV)

**Location:** The project is located in the Mississippi River and along its banks from the vicinity of Cessions Towhead at River Mile 616 AHP, to Union Point at River Mile 326 AHP, a distance of approximately 290 miles.

**Description:** The plan of improvement consists of stabilization of the Mississippi River main channel in a desirable alignment for purposes of flood control and navigation by means of revetments, river training structures (dikes, chevrons, and bendway weirs), and improvement dredging.

**Issues:** The Lower Mississippi River experienced the flood of record at many locations during 2011. Many channel improvement features including both revetments and dikes were damaged.

**Importance:** River training structures improve navigation conditions, stabilize bends, and reduce maintenance dredging requirements. Revetment construction maintains channel alignment and protects the banks from erosion.

**Risk:** Catastrophic damage to the navigation channel, river banks, and adjacent mainline levee is likely to occur if the system is not constructed as authorized.

**Consequence:** Failure to adequately fund will result in channel deterioration which would adversely impact the navigation industry in economically and efficiently transporting commodities on the Mississippi River. Continued erosion of banks and/or failure of revetments would adversely impact channel alignment and threaten the integrity of the mainline levee system.



Stone Dike Construction



Revetment Construction – Articulated Concrete Mat (ACM)

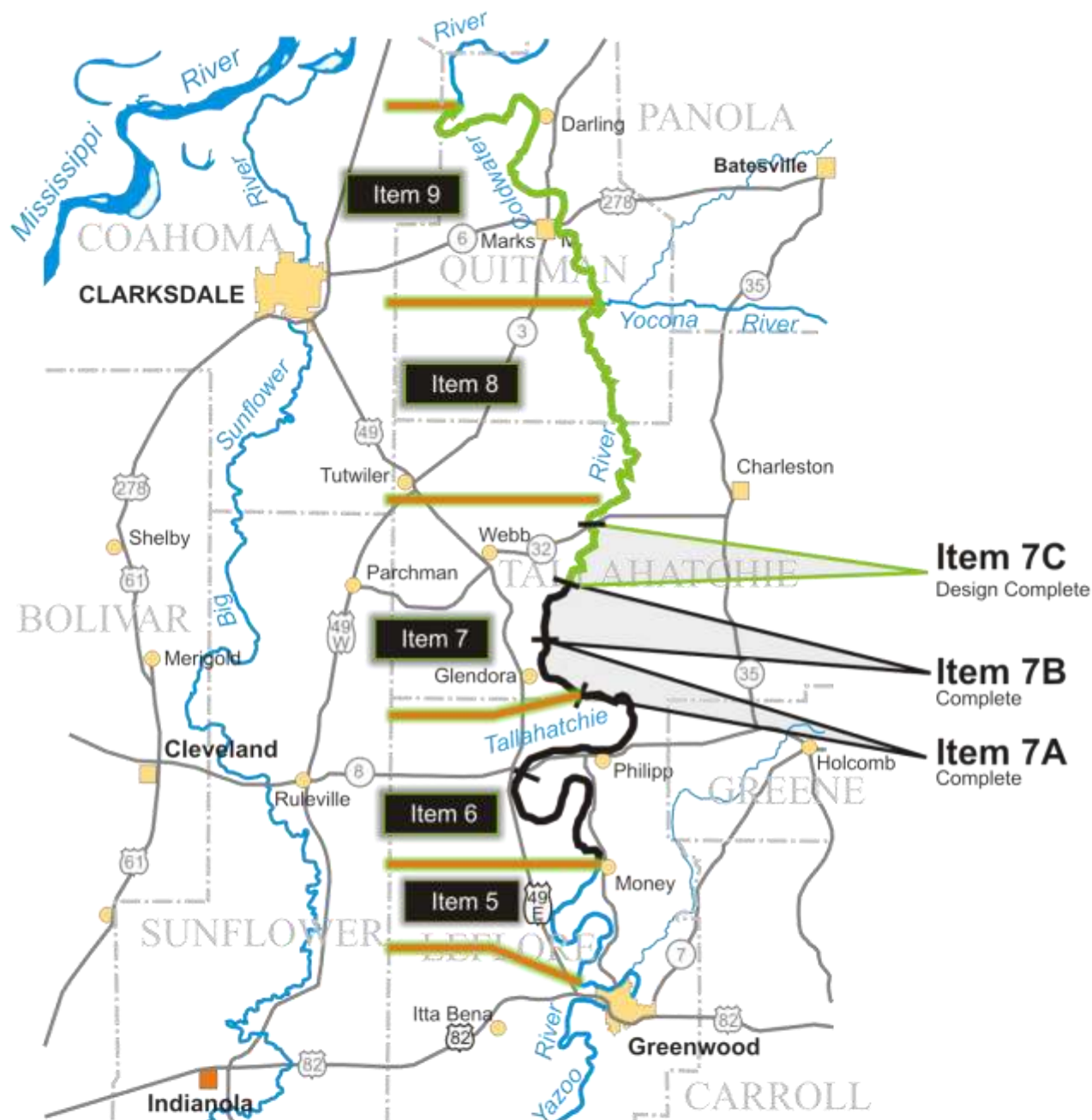
**Activities for FY 13:** Budgeted funds are being used for dike construction at Victoria Bend Left Descending Bank (LDB), MS, and for revetment construction at Racetrack, MS. The 2011 flood damage repairs have been prioritized on a regional basis. Additional funds of \$26,400,000 could be used to fully fund dike construction at Lake Providence, LA-RM483R (\$8,800,000), Racetrack Towhead, MS-RM 432R (\$4,500,000) and Willow Cutoff, LA-RM-462.8R (\$1,500,000), and construct an upstream extension to the existing revetments at Grand Gulf (\$4,460,000) and Togo Island (\$7,140,000). Supplemental funds of \$13,200,000 will be used for design and construction of the regional priority repairs within MVK during FY 13. Repairs consist of construction of four stone dikes at Marshall Brown, MS, to replace 12 stone hard points destroyed during the 2011 flood.

**Acquisition Strategy:** Articulated concrete mat (ACM) is being placed at one high priority site, Racetrack, and will be placed by in-house hired labor. Three contracts will be awarded in FY 13. One contract is for stone bank paving associated with revetment. Stone bank paving is required at all revetment sites at which the bank is graded to a stable slope. Contracts for dike construction at Victoria Bend LDB and Marshall Brown will also be awarded.

**Project Sponsor/Customer:** Navigation industry, environmental community, and Mississippi Levee, <sup>50</sup> Louisiana Levee, and Southeast Arkansas Levee Boards.

**Congressional Interest:** Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), Alexander (LA-5), Thompson (MS-2), and Harper (MS-3).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Supplemental	FY 13 Total Capability (Regular)
Construction	\$1,241,000,000	\$971,004,000	\$20,614,000	\$1,786,500	\$47,014,000



Upper Yazoo Projects (UYP), MS



US Army Corps  
of Engineers  
Vicksburg District

## Project Fact Sheet

# Yazoo Basin, Upper Yazoo Projects, MS

Flood Control Acts of 1936, Sec. 4 and 8a; 1941, Sec. 3b and 3g; 1946, Sec. 3, 10f, and 10g; and 1965, Sec. 2045

### Mississippi River and Tributaries, Construction (FRM)

**Location:** The Upper Yazoo Projects (UYP) includes channel and levee features along the main channel of the Yazoo, Tallahatchie, and Coldwater Rivers from the vicinity of Yazoo City, MS, to the vicinity of the confluence of Arkabutla Creek with the Coldwater River.

**Description:** The project provides much needed flood risk reduction for this region by decreasing flood stages up to 3 feet in most areas. The project began in 1976 near Yazoo City and had advanced to near Sidon, MS before the project was reformulated in 1994. Reformulation resulted in approximately 130.3 miles of channel enlargement in nine segments from Sidon to Darling, MS. The project focuses on cleaning out and restoring channel capacity to the Yazoo River and its tributaries. Before initiating construction on the UYP, about 1.1 million acres were subject to the 100-year flood. Damages totaled more than \$18,600,000 annually, including \$3,000,000 in urban damages and 700,000 acres of agricultural land subject to inundation. To date, 12,400 acres of mitigation lands have been acquired. A total of 16,250 acres of mitigation land is required for this project.

**Issues:** Absence of funding will delay remaining flood control and economic benefits to the area by not allowing the initiation of any new construction items. Currently there are 29,000 people protected in the 100-year flood plain.

**Importance:** The project provides flood protection for 8,900 square miles in this region through reduction of flood stages up to 3 feet in most areas. Approximately 26 million cubic yards of material will be excavated at the project's completion providing an average conveyance increase of approximately 50 percent over current channel capacity. Existing flooding damages would be reduced by 55 percent.

**Risk:** Impacts include loss of life, isolation of homes and numerous rural communities and months of flooding.

**Consequence:** Commercial impacts include roads, agricultural and timber production. Farmland is at risk of flooding, resulting in devastation of the primary economic engine of the region. Environmental losses of terrestrial habitat and wildlife would be significant.



Construction along the bank of the Tallahatchie River  
Item 6B near Phillip, MS

**Activities for FY 13:** Funds of \$16,850,000 could be used to continue design of Items 7D and 8A (\$500,000) and fully fund Items 7C Ph II (\$10,350,000) and Lamb-Fish (\$6,000,000).

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** The Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Construction	\$445,000,000	\$297,266,000	\$0	\$16,850,000

Area of  
Enlarged  
Map

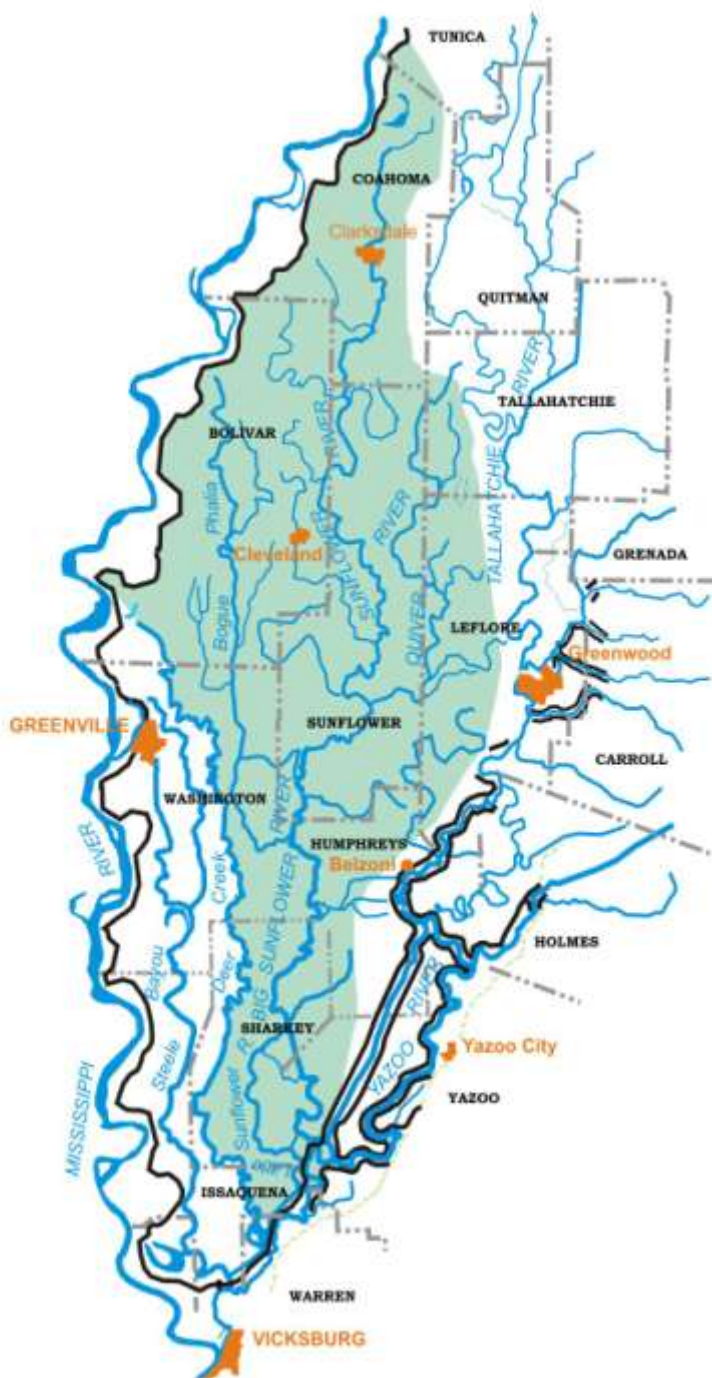


MISSISSIPPI

Legend

 Drainage  
Basin

 Levee



Big Sunflower River, MS



US Army Corps  
of Engineers  
Vicksburg District

# Project Fact Sheet

## Yazoo Basin, Big Sunflower River, MS

Flood Control Act of 1944, 1950, 1962 and 1965

### Mississippi River and Tributaries, Construction (FRM)

**Location:** The Steele Bayou Basin lies within the Delta region of west-central Mississippi. Its 752-square-mile drainage area runs from north of Greenville to its confluence with the Yazoo River just north of Vicksburg.

**Description:** The project consists of 739 miles of channel, 9 miles of levees and will protect 195,000 acres against the design flood. An additional 395,000 acres will be benefited because of improved drainage conditions. The project will provide flood protection and environmental enhancements for this region.

**Issues:** The Environmental Protection Agency and Mississippi Department of Environmental Quality have recognized in recent years the impacts of sediment and nutrients on environmental resources in the Big Sunflower River Basin. The installation of sediment structures will improve the water quality in the basin.

**Importance:** Between the years 1990-2009 the sediment reduction structures have reduced approximately 686,000 tons of sediment that would have naturally been deposited in delta streams. Keeping sediment out of the streams improves channel flow capacity during times of flooding and reduces dredging frequency.

These structures also benefit the environment by keeping agricultural fertilizers and pesticides out of the streams, thereby contributing to another one of the Corps major missions of ecosystem restoration. The monitoring of water quality over a number of years will allow documentation of these long-term benefits and the development of Total Maximum Daily Load targets.

**Risk:** Impacts could include increased sediment and nutrient loads. Diminished channel capacity would increase the frequency, duration, and effects of flooding in this area.

**Consequence:** Without additional funding, all work will be suspended. No further monitoring and documentation of long-term benefits will occur and work addressing sedimentation and erosion control will come to a halt.



Sediment Reduction Structure

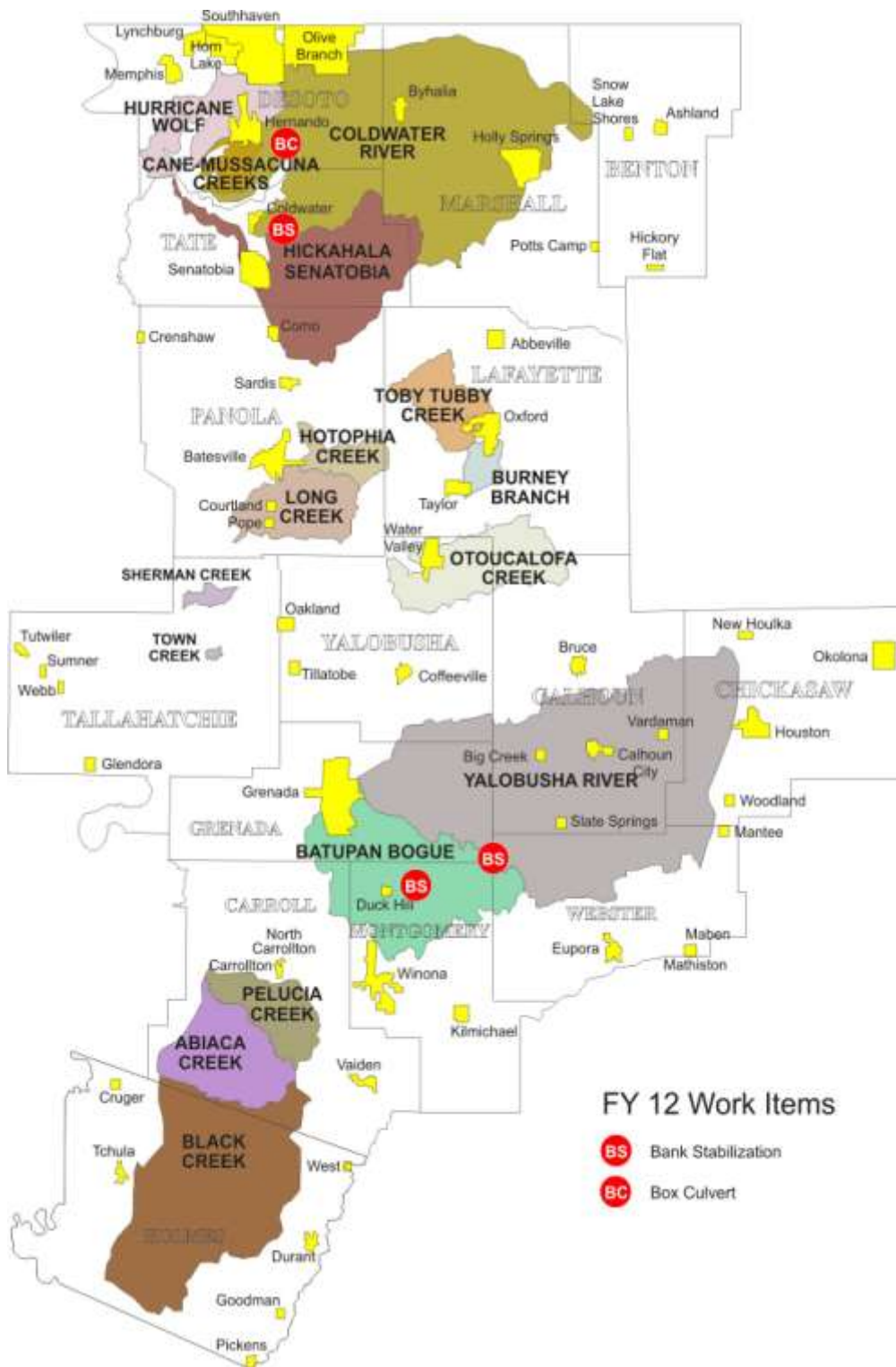
**Activities for FY 13:** Funds of \$1,700,000 could be used to fully fund and award Sediment Reduction Structures Phase VII (\$900,000) and continue water quality and sediment and nutrient monitoring (\$800,000).

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Construction	\$134,300,000	\$128,539,000	\$0	\$1,700,000



## Delta Headwaters Project (DHP), MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Delta Headwaters Project

Emergency Jobs Appropriations Act of 1982; WRDA 1986, Section 103e

#### Mississippi River and Tributaries, Construction (FRM)

**Location:** The project is located in the eastern (hill) section of the Yazoo River Basin, MS.

**Description:** The project consists of 16 watersheds, ranging in size from 1 square mile (Town Creek) to over 600 square miles (Coldwater River), with features that include bank stabilization, grade control structures, floodwater-retarding structures, and channel modifications for flood damage reduction, bank stabilization and sedimentation/erosion control.

**Issues:** The program is vital to the ongoing erosion prevention in the 16 authorized watersheds. Benefits of this work include the reduction of the risk of flooding in the Yazoo Basin, reduction of sediment deposited in downstream reservoirs and streams, reduction of the need for maintenance dredging, and improvement of degradation of wildlife habitat in and along the streams.

**Importance:** The project provides important flood control, environmental, water quality, and sediment reduction benefits, in addition to economic stimulus benefits to the basin. It is the only program of its kind in the Mississippi River Valley and has proven to be a valuable model that can be used throughout the entire Mississippi River Valley.

Erosion from agricultural land frequently carries agricultural chemicals and fertilizers adding to the Gulf Hypoxia. Consequently, reducing erosion improves water quality. Once stabilized, stream systems provide improved wildlife habitat both in and along the streams.

**Risk:** The program is not within the Administration's policy; therefore, no long-term program planning can occur. There is no authority to maintain structures that are currently providing services for landowners, towns, and counties in the Yazoo River Basin.

**Consequence:** Without funding, all work will be suspended, resulting in no further work to stop sedimentation, control erosion, or improve water quality. Land will continue to erode, towns and farms will continue to flood, and existing structures will fall into disrepair.



Yazoo Basin, MS  
Mississippi Delta  
Headwaters Project

**Activities for FY 13:** Carryover funds are being used for supervision and administration of ongoing contracts. Additional funds of \$13,000,000 could be used to fully fund two bank stabilization (\$1,600,000); three riser pipes (\$1,600,000) contracts; continue design efforts (\$6,500,000); construction management (\$2,400,000); and continue site monitoring by the Natural Resources Conservation Service/U.S. Geological Survey (\$900,000).

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Multiple

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Construction	\$438,022,000	\$438,022,000	\$0	\$13,000,000



Yazoo Backwater Less Rocky Bayou, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Yazoo Backwater Less Rocky Bayou, MS

Flood Control Acts of 1941 and 1944

#### Mississippi River and Tributaries, Construction (FRM)

**Location:** The Yazoo Backwater Project lies in the southern part of the Delta in west-central Mississippi. It extends from just north of Vicksburg approximately 60 miles to the vicinity of Hollandale and Belzoni, MS.

**Description:** The Yazoo Backwater Project is situated between the mainline Mississippi River levee and the escarpment which forms the eastern boundary of the Delta and is subject to backwater flooding from the Mississippi River. It comprises about 2,000 square miles. Four greentree reservoirs and associated pump stations, constructed and funded by the Corps of Engineers, are managed by the U.S. Forest Service and are required mitigation features for the Yazoo Backwater Project. Both regular and ARRA appropriations were spent in FY 2008 to FY 2011 to rehabilitate and operate the pumps. A total of 8,800 acres of lands were purchased to offset environmental losses from the construction of the Yazoo Backwater and Satartia area levees.

**Issues:** No funds for the operation and maintenance of ongoing mitigation features. An additional acquisition of 4,000 acres is needed to fulfill the terrestrial mitigation requirements.

**Importance:** The project's greentree reservoirs and associated pump stations are necessary mitigation features and provide valuable habitat for waterfowl species.

**Risk:** Without funding, maintenance cycles will not be performed, increasing the risk of pump failure. Operation of the four greentree reservoirs will be limited to only what would be allowed to fill naturally via rainfall.

**Consequence:** Impacts include increased repair costs due to inadequate maintenance cycles. Environmental losses of habitat for waterfowl would be significant. By not purchasing the additional mitigation lands now, each year additional lands are required due to the time lag between the losses occurred and when mitigation is provided.



Waterfowl - Yazoo Backwater Area

**Activities for FY 13:** Funds of \$4,575,000 could be used to continue operation of the greentree reservoirs for mitigation purposes (\$75,000), and continue purchase of mitigation lands for unavoidable environmental losses from previously constructed projects (\$4,500,000).

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board and Mississippi Levee Board

**Congressional Interest:** House: Thompson (MS-2); Senate: Cochran and Wicker (MS).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Construction	\$507,000,000	\$61,658,000	\$0	\$4,575,000



Yazoo Basin Reformulation, MS



**US Army Corps  
of Engineers**  
Vicksburg District

Flood Control Acts of 1936, Sections 4 & 8a; 1941, Sections 3b & 3g; and 1946, Sections 3, 10f, & 10g

## Project Fact Sheet

### Yazoo Basin, Reformulation, MS

#### Mississippi River and Tributaries, Construction (FRM)

**Location:** The project includes tributaries and streams of the Yazoo River which originate in the hills of Mississippi and extend to the delta.

**Description:** The Reformulation Study covers the remaining authorized unconstructed features of the Yazoo Basin, which is being accomplished in four phases. The first two study phases of the Yazoo Basin Reformulation, Upper Steele Bayou and Upper Yazoo Projects, are complete and the recommended projects are under construction. The third phase, the Yazoo Backwater Project, was suspended due to a 404c veto by the Environmental Protection Agency (EPA) on 31 August 2008. The fourth and final phase, the Tributaries study, is underway. With funding, studies could complete in FY 16.

**Issues:** Several tributary stream channels are insufficient to convey flood flows and have local levee systems that are inadequate to contain the larger runoffs from the hills.

**Importance:** The project provides important flood control, environmental, water quality, and sediment reduction benefits in addition to economic stimulus benefits to the basin.

**Risk:** Impacts include loss of life, isolation of homes and numerous rural communities and months of flooding.

**Consequence:** Several tributary stream channels are insufficient to convey flood flows and have local levee systems that are inadequate to contain the larger runoffs. Without additional funding, all studies will be suspended and prolong flood damage reduction to numerous communities.



The red lines depict the remaining authorized unconstructed features of the Yazoo Basin.

**Activities for FY 13:** The studies have been suspended due to lack of funds. Funds of \$500,000 could be used to continue feasibility studies.

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

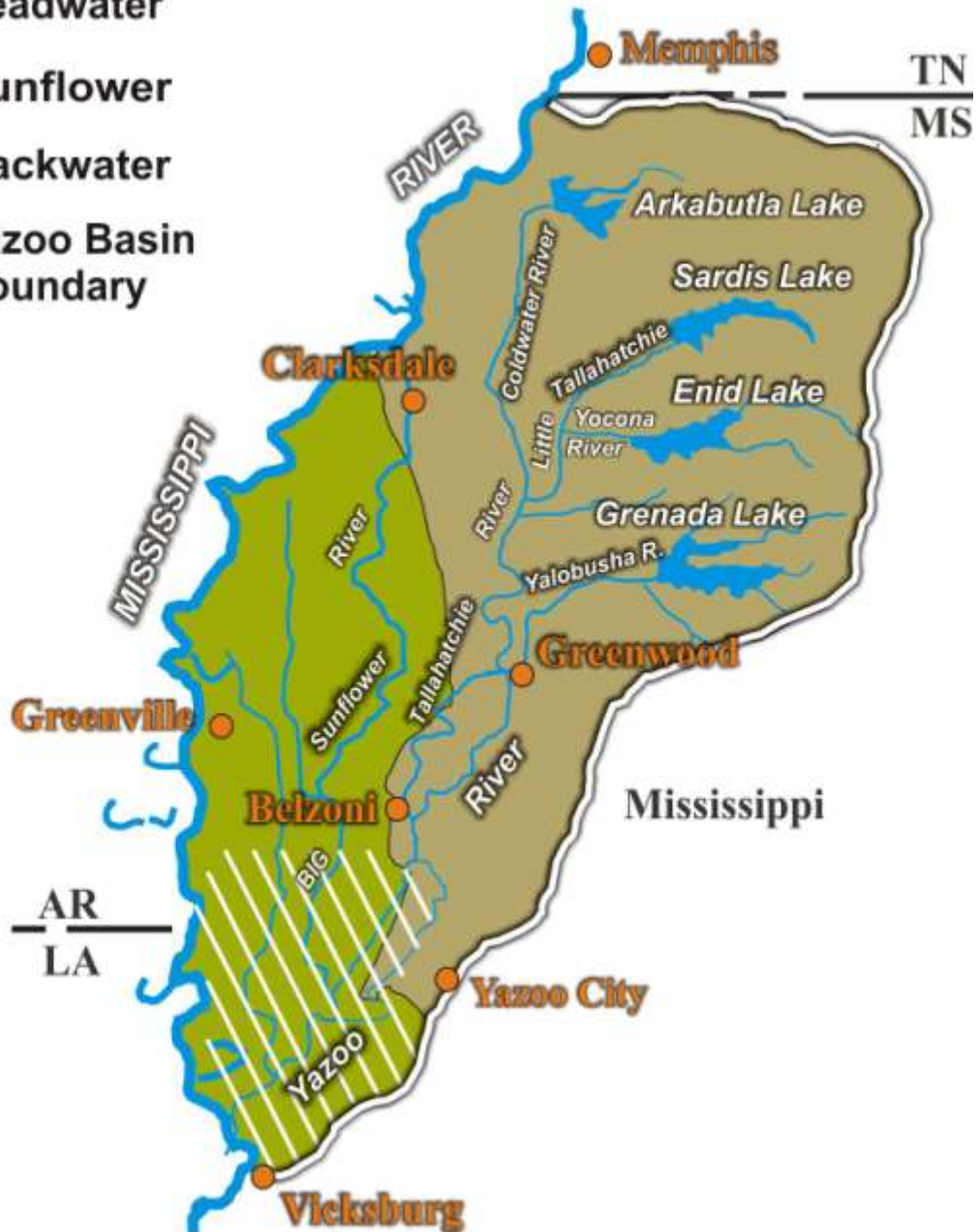
**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Construction	\$49,500,000	\$44,826,500	\$0	\$500,000

## Legend

- Headwater
- Sunflower
- Backwater
- Yazoo Basin Boundary



Yazoo Basin, Main Stem, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Main Stem, MS

Flood Control Acts of 1936, Sec. 4 and 8a; 1941, Sec. 3b and 3g; 1946, Sec. 3, 10f, and 10g

#### Mississippi River and Tributaries, Construction (FRM)

**Location:** The Main Stem feature in the Yazoo Basin consists of enlarged levee improvements along the Yazoo, Tallahatchie, and Coldwater Rivers from Yazoo City to Prichard, MS; and channel clearing, cutoffs, and channel enlargement along the Yazoo, Tallahatchie, and Coldwater Rivers from Yazoo City to Arkabutla Lake. Sheley Bridge is located on the Tallahatchie River in Tallahatchie County, MS.

**Description:** The authorized work provides protection to adjacent areas against floods. The major remaining work includes raising deficient levees and closure of gaps in the Yazoo River levee system. This work is deferred until completion of the Mississippi River mainline and Yazoo Backwater levees.

**Issues:** Monitoring of Sheley Bridge bank stabilization was directed by Supplemental Appropriations Act of 1982

**Importance:** Construction of bank stabilization measures and drift deflectors to protect Sheley Bridge supports was completed in FY 86. Monitoring of the bank stabilization measures reduces risks to bridge stability.

**Risk:** Without funding for this item of work, the Corps is faced with the inability to perform this congressionally mandated requirement. Monitoring of bank stabilization measures is needed to ensure the integrity of the bridge supports.

**Consequence:** Inability to monitor, report, and recommend engineering solutions should detrimental bank stability issues occur at vehicle bridge crossing.



Inspection at Sheley Bridge

**Activities for FY 13:** Funds of \$25,000 could be used to monitor bank stabilization at Sheley Bridge.

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Construction	\$267,800,000	\$34,879,000	\$0	\$25,000



## Multi-Agency Interpretive and Education Center



**US Army Corps  
of Engineers**  
Vicksburg District

## Yazoo Backwater Multi-Agency Interpretive and Education Center, MS

Consolidated Appropriations Act, 2004, Section 145 (Public Law 108-199).

# Project Fact Sheet

## Mississippi River and Tributaries, Construction (FRM)

**Location:** The Multi-Agency and Interpretive Center was to be located in Rolling Fork, MS, on land purchased by the Vicksburg District.

**Description:** The FY 11 budget included rescission of funds for the Yazoo Backwater project. Thus, project activities were halted. Inclement weather caused damage to an existing historic structure on the property (Red Barn). The existing structure was demolished and debris cleared in 2012.

**Issues:** Plans for the Multi-Agency Interpretive and Education Center are 95 percent complete and real estate acquisition is complete. All work ceased due to the FY 11 rescission of funds.

**Risk:** Without additional funding to complete design and award a construction contract, the project will be unable to proceed to construction as directed.

**Consequence:** Without additional funding, the project will be unable to proceed to construction as directed.



**Multi-Agency Interpretive  
and Education Center**

**Activities for FY 13:** Carryover funds are being used to comply with mitigation activities agreed to with the State Historic Preservation Officer for removal of the Red Barn. Funds of \$3,906,529 could be used to complete design and award construction contract.

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** N/A

**Congressional Interest:** Senate: Cochran and Wicker (MS); House: Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 12	FY 13 Budget	FY 13 Total Capability
Construction	\$6,000,000	\$2,093,471	\$0	\$3,906,529





# **Mississippi River & Tributaries Maintenance**

# **Mississippi River & Tributaries Maintenance**



*Mississippi River and Tributaries*

# **MR&T Maintenance**

**The MR&T Maintenance program focuses on the need to preserve the existing infrastructure and provide justified levels of service at the least cost.**



Mississippi River Levees, AR, LA, and MS



**US Army Corps  
of Engineers**  
Vicksburg District

FCA's 1928, 1936, 1938, 1941, 1944, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary  
Authorization Act of 1971, WRDA 92, WRDA 00

## Project Fact Sheet

### Mississippi River Levees, AR, LA & MS

#### Mississippi River and Tributaries, Maintenance (FRM)

**Location:** The Mississippi River Levee system on the west bank extends from Allenville, MO, southward to Venice, LA, and on the east bank from Hickman, KY, to opposite Venice, LA, except where interrupted by hills and tributary streams.

**Description:** The Mississippi River Levee System provides flood risk reduction to over 23 thousand square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to highly developed agricultural areas, the levees afford protection to urban areas and many industries.

**Issues:** Levee slides are being repaired along the Mississippi River Levee System on the East and West banks utilizing supplemental funding. Additional slides are developing as a result of heavy rainfall in December 2012 and January 2013.

**Importance:** Although levee slides are an expected occurrence in any levee system, the repair of levee slides is of prime importance in maintaining a robust levee system capable of performing its design function during all flood events up to and including the project design flood.

**Risk:** Leaving slides in disrepair may lead to levee safety issues, levee certification issues, reduced levels of flood protection, and increased risk of flood damage.

**Consequence:** Failure to operate and maintain the levees appropriately jeopardizes project integrity, and places the safety of the public at increased risk.



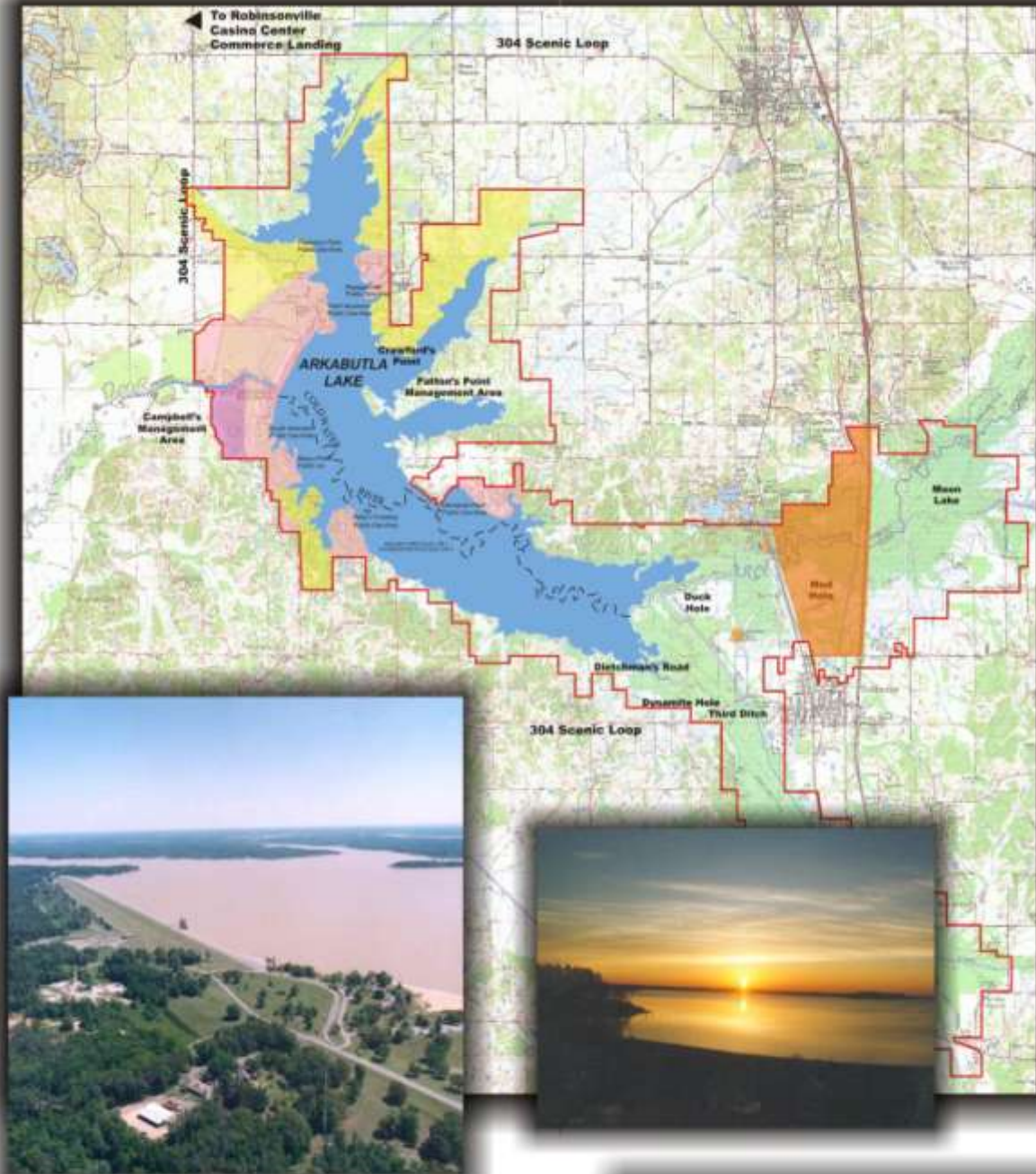
Two Levee Slides

**Activities for FY 13:** Budgeted funds are being used to perform routine operation and maintenance activities, repair levee slides, and resurfacing levees.

**Project Sponsor/Customer:** 5<sup>th</sup> LA Levee District, Southeast Arkansas Levee District, and the Board of Mississippi Levee Commissioners

**Congressional Interest:** Senate: Boozman and Pryor (AR), Landrieu and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Cotton (AR-4), Scalise (LA-1), Fleming (LA-4), Alexander (LA-5), Nunnelee (MS-1), Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$1,690,000	\$1,690,000



## Arkabutla Lake





**US Army Corps  
of Engineers**  
Vicksburg District

# Project Fact Sheet

## Yazoo Basin, MS, Arkabutla Lake

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

### Mississippi River and Tributaries, Maintenance, FRM, REC, ENS

**Location:** Arkabutla Lake is located in northwest Mississippi, north of Arkabutla, Mississippi. Arkabutla Dam is located in Tate and DeSoto Counties, and the lake encompasses portions of both counties.

**Description:** Arkabutla Lake is a 57,250-acre multi-purpose project located on the Coldwater River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Outdoor recreation and tourism associated with the lake contribute significant support to the regional economy.

**Issues:** Due to the age of this project, continued emphasis on critical routine and non-routine maintenance activities is required to ensure the integrity of the project and its flood control structures, in order to protect people and property from downstream flooding.

**Importance:** Arkabutla Dam, completed in 1943 as a part of the comprehensive flood control plan for the Mississippi River and Tributaries Project, is operated in coordination with Sardis, Enid, and Grenada Dams to reduce flood damages in the Yazoo Basin of the Mississippi Delta, one of the most significant agricultural production areas in the Nation. Through FY 11, these four projects have prevented over \$1.3 billion in flood damages within the Yazoo Basin. Following construction of Arkabutla Dam, land-and water-based recreation became a popular pastime for project visitors. In FY 11, over 904,000 visitors utilized the project and its 13 developed recreation areas operated by the Corps. With multiplier effects, visitor spending resulted in \$14.7 million total sales, \$5.3 million in total personal income, and supported 237 jobs in the local communities. Environmental stewardship activities are conducted to protect and enhance the project's vegetative, wildlife, fisheries, and cultural resources.

**Risk:** Failure to adequately fund this project jeopardizes the flood risk management capabilities for which the project was designed and has performed in an excellent manner for over 70 years. Funding is required to adequately operate and maintain project recreational facilities and continue mandated environmental stewardship activities.

**Consequence:** Failure to adequately operate and maintain the project and its facilities would jeopardize project integrity and potentially lead to an increase in the risk of damages from flooding. Reductions in recreational service

levels will potentially lead to reduced facility availability, decreased public safety, and lower levels of recreational visitor satisfaction. Reduction in environmental stewardship services may result in inability to monitor and control such things as cultural resource sites, endangered species, invasive species, and forestry resources.



**Arkabutla Dam**

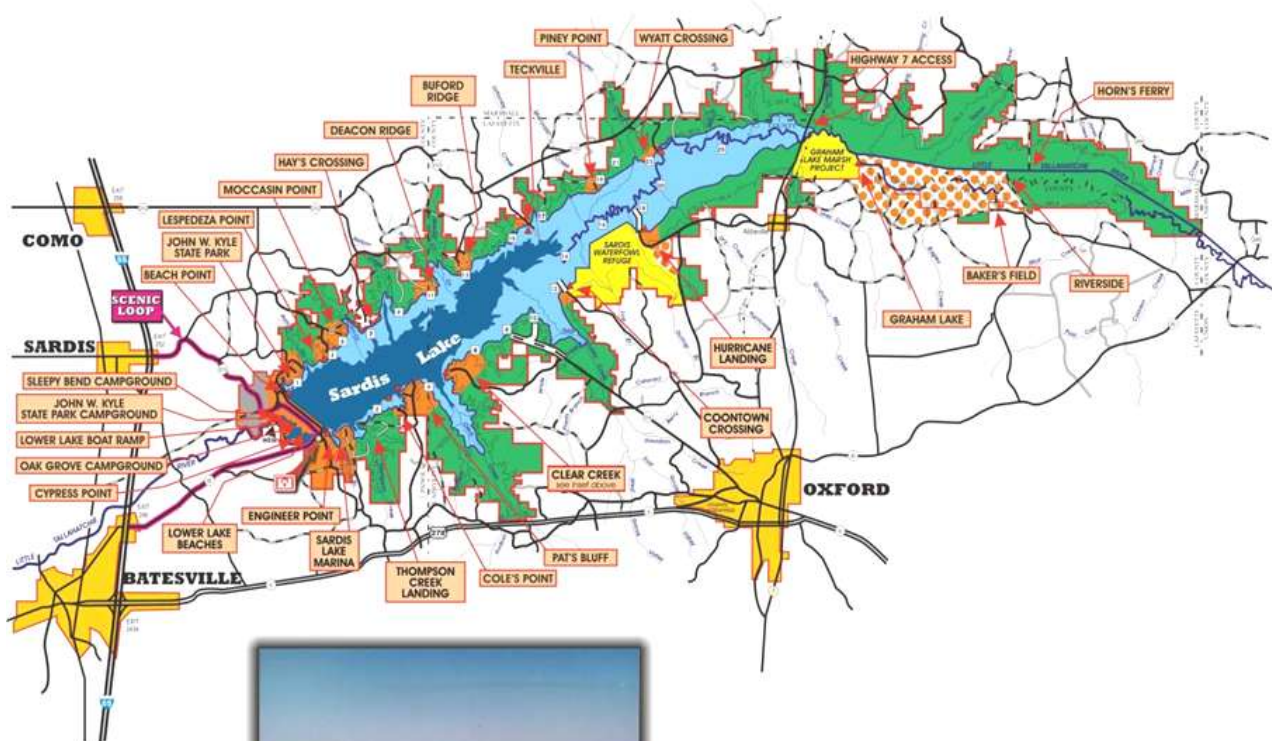
**Activities for FY 13:** Budgeted funds are being used to continue routine operation and maintenance at a reduced level of service in all authorized mission areas. Additional funds of \$4,758,000 could be used to achieve acceptable levels of services (\$1,100,000), re-route North Overflow Spillway Drop-Inlet Drain (\$50,000), construct Pratt Road to Spillway Bridge (\$2,175,000), install ditch culverts at Outlet Channel (\$150,000), replace antiquated public-use restrooms at Bayou Point and Dub Patton Boat Ramps (\$200,000), and develop design and modernize Hernando Point Day Use (\$1,083,000).

**Acquisition Strategy:** Due to limited funding levels, no construction contracts are scheduled to be awarded in FY 13.

**Project Sponsor:** N/A.

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Nunnelee (MS-1).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$5,203,00	\$9,961,000



Sardis Lake, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, MS, Sardis Lake

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

#### Mississippi River and Tributaries, Maintenance (FRM, REC, ENS)

**Location:** Sardis Lake is located in north-central Mississippi southeast of Sardis, Mississippi. Sardis Dam is located in Panola County, and the lake encompasses portions of Panola, Lafayette, and Marshall Counties.

**Description:** Sardis Lake is a 98,357-acre multi-purpose project located on the Little Tallahatchie River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Outdoor recreation and tourism associated with the lake contribute significant support to the regional economy.

**Issues:** Due to the age of this project, continued emphasis on critical routine and non-routine maintenance activities is required to ensure the integrity of the project and its flood control structures, in order to protect people and property from downstream flooding.

**Importance:** Sardis Dam, completed in 1940 as a part of the comprehensive flood control plan for the Mississippi River and Tributaries Project, is operated in coordination with Arkabutla, Enid, and Grenada Dams to reduce flood damages in the Yazoo Basin of the Mississippi Delta, one of the most significant agricultural production areas in the Nation. Through FY 11, these four projects have prevented over \$1.3 billion in flood damages within the Yazoo Basin. Following construction of Sardis Dam, land- and water-based recreation became a popular pastime for project visitors. In FY 11, over 1.3 million visitors utilized the project and its 20 developed recreation areas operated by the Corps. With multiplier effects visitor spending resulted in \$25.5 million total sales, \$9.1 million in total personal income, and supported 464 jobs in the local communities. Environmental stewardship activities are conducted to protect and enhance the project's vegetative, wildlife, fisheries, and cultural resources.

**Risk:** Failure to adequately fund this project jeopardizes the flood risk management capabilities for which the project was designed and has performed in an excellent manner for over 70 years. Funding is required to adequately operate and maintain project recreational facilities and continue mandated environmental stewardship activities.

**Consequence:** Failure to adequately operate and maintain the project and its facilities would jeopardize project integrity and potentially lead to an increase in the risk of damages from flooding. Reductions in recreational service

levels will potentially lead to reduced facility availability, decreased public safety, and lower levels of recreational visitor satisfaction. Reduction in environmental stewardship services may result in inability to monitor and control such things as cultural resource sites, endangered species, invasive species, and forestry resources.



Sardis Lake Dam and Lower Lake

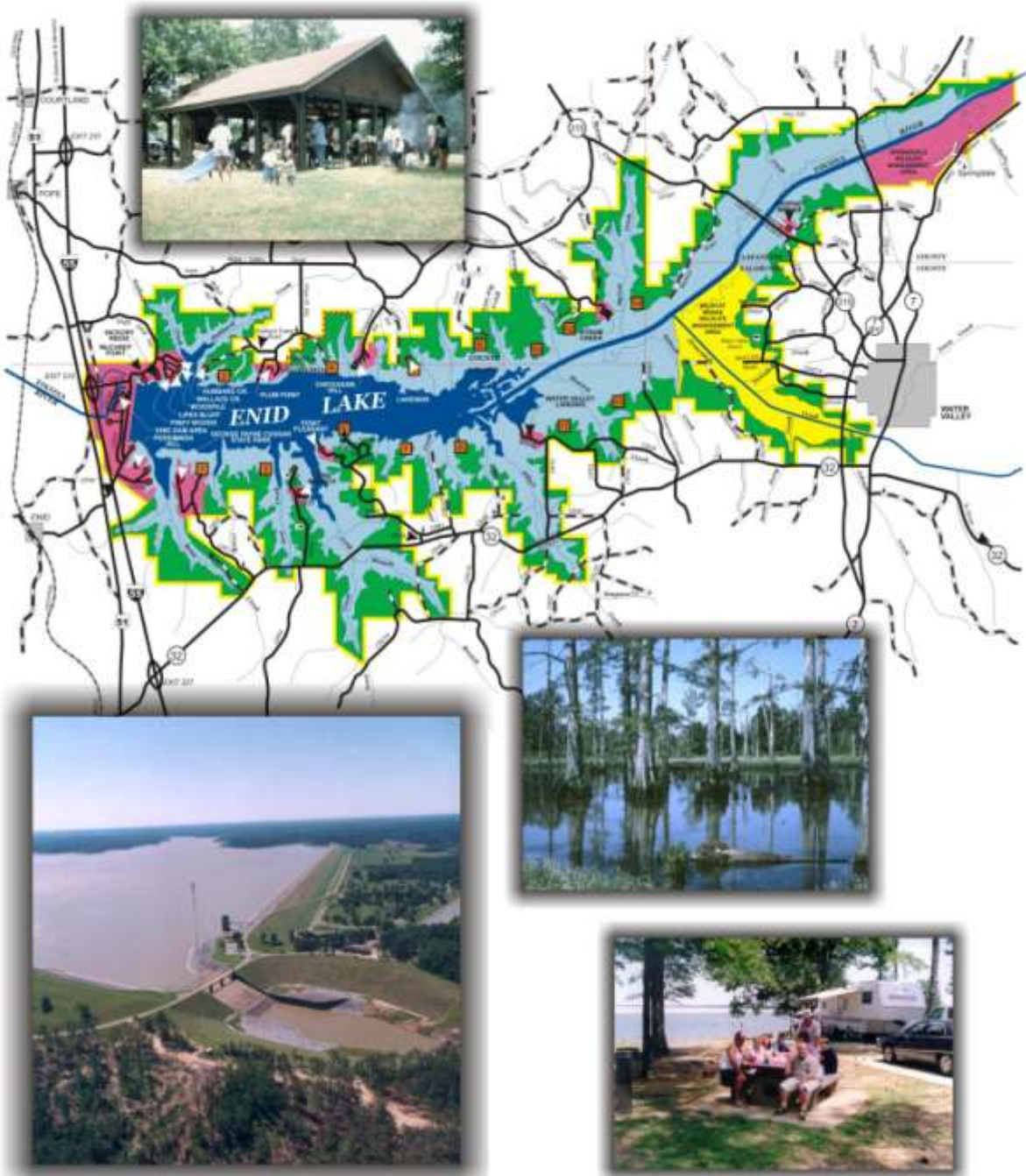
**Activities for FY 13:** Budgeted funds will be used to continue routine operation and maintenance at a reduced level of service in all authorized mission areas. Additional funds of \$4,870,000 could be used to achieve acceptable levels of service (\$905,000), replace Clear Creek water storage tank and rehab Hurricane Landing water storage tank (\$175,000), realign and raise State Park Road (\$2,150,000), prepare plans and specifications (P&S) and construction for Paradise Point Parking and Beach (\$1,325,000), prepare P&S to replace joint sealing in collection ditches on the dam (\$65,000), and sandblast and paint Intake Structure Bridge (\$250,000).

**Acquisition Strategy:** None.

**Project Sponsor:** N/A.

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Nunnelee (MS-1), Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$6,493,000	\$11,363,000



Enid Lake, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, MS, Enid Lake

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

#### Mississippi River and Tributaries, Maintenance(FRM, REC, ENS)

**Location:** Enid Lake is located in north-central Mississippi southeast of Batesville, Mississippi. Enid Dam is located in Yalobusha County, and the lake encompasses portions of Panola, Yalobusha, and Lafayette Counties.

**Description:** Enid Lake is a 44,036-acre multi-purpose project located on the Yocona River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Outdoor recreation and tourism associated with the lake contribute significant support to the regional economy.

**Issues:** Due to the age of this project, continued emphasis on critical routine and non-routine maintenance activities is required to ensure the integrity of the project and its flood control structures, in order to protect people and property from downstream flooding.

**Importance:** Enid Dam, completed in 1952 as a part of the comprehensive flood control plan for the Mississippi River and Tributaries Project, is operated in coordination with Arkabutla, Grenada, and Sardis Dams to reduce flood damages in the Yazoo Basin of the Mississippi Delta, one of the most significant agricultural production areas in the Nation. Through FY 11, these four projects have prevented over \$1.3 billion in flood damages within the Yazoo Basin. Following construction of Enid Dam, land-and water-based recreation became a popular pastime for project visitors. In FY 11, over 1,970,000 visitors utilized the project and its 15 developed recreation areas operated by the Corps. With multiplier effects visitor spending resulted in \$11.9 million total sales, \$4.3 million in total personal income, and supported 190 jobs in the local communities. Environmental stewardship activities are conducted to protect and enhance the project's vegetative, wildlife, fisheries, and cultural resources.

**Risk:** Failure to adequately fund this project jeopardizes the flood risk management capabilities for which the project was designed and has performed in an excellent manner for over 61 years. Funding is required to adequately operate and maintain project recreational facilities and continue mandated environmental stewardship activities.

**Consequence:** Failure to adequately operate and maintain the project and its facilities would jeopardize project integrity and potentially lead to an increase in the risk of

damages from flooding. Reductions in recreational service levels will potentially lead to reduced facility availability, decreased public safety, and lower levels of recreational visitor satisfaction. Reduction in environmental stewardship services may result in inability to monitor and control such things as cultural resource sites, endangered species, invasive species, and forestry resources.



**Enid Dam**

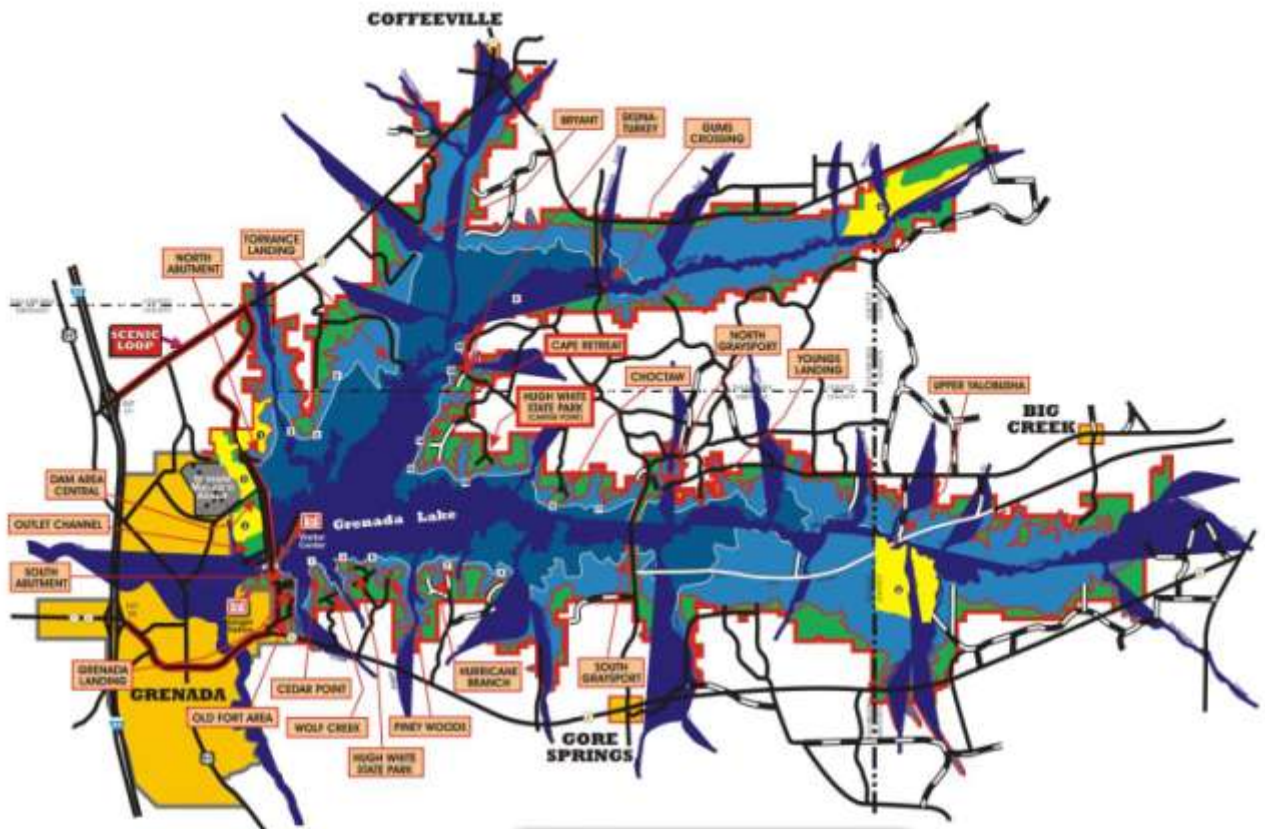
**Activities for FY 13:** Budgeted funds are being used to continue routine operation and maintenance at a reduced level of service in all authorized mission areas. Additional funds of \$2,351,000 could be used to achieve acceptable level of service (\$1,040,000), replace joint material at Outlet Channel and Stilling Basin Chute (\$200,000), replace cable on overhead crane at Intake Structure (\$30,000), blast and paint Emergency Spillway Bridge (\$120,000), replace flood damage reduction equipment (two dozers and mini-excavator (\$450,000), water well at Persimmon Hill (\$461,000), and prepare plans and specifications for accessible fishing pier at Outlet Channel (\$50,000).

**Acquisition Strategy:** None.

**Project Sponsor:** N/A.

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2), Nunnelee (MS-1).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$4,795,000	\$7,146,000



Grenada Lake, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, MS, Grenada Lake

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

#### Mississippi River and Tributaries, Maintenance (FRM, REC, ENS)

**Location:** Grenada Lake is located in north-central Mississippi northeast of Grenada, Mississippi. Grenada Dam is located in Grenada County, and the lake encompasses portions of Grenada, Yalobusha, and Calhoun Counties.

**Description:** Grenada Lake is a 90,379-acre multi-purpose project located on the Yalobusha River and stores floodwater to provide for flood damage reduction in the Yazoo Basin. Outdoor recreation and tourism associated with the lake contribute significant support to the regional economy.

**Issues:** Due to the age of this project, continued emphasis on critical routine and non-routine maintenance activities is required to ensure the integrity of the project and its flood control structures, in order to protect people and property from downstream flooding.

**Importance:** Grenada Dam, completed in 1954 as a part of the comprehensive flood control plan for the Mississippi River and Tributaries Project, is operated in coordination with Arkabutla, Enid, and Sardis Dams to reduce flood damages in the Yazoo Basin of the Mississippi Delta, one of the most significant agricultural production areas in the Nation. Through FY 11, these four projects have prevented over \$1.3 billion in flood damages within the Yazoo Basin. Following construction of Grenada Dam, land-and water-based recreation became a popular pastime for project visitors. In FY 11, over 1.4 million visitors utilized the project and its 26 developed recreation areas operated by the Corps. With multiplier effects visitor spending resulted in \$49.9 million total sales, \$14.2 million in total personal income, and supported 742 jobs in the local communities. Environmental stewardship activities are conducted to protect and enhance the project's vegetative, wildlife, fisheries, and cultural resources.

**Risk:** Failure to adequately fund this project jeopardizes the flood risk management capabilities for which the project was designed and has performed in an excellent manner for over 59 years. Funding is required to adequately operate and maintain project recreational facilities and continue mandated environmental stewardship activities.

**Consequence:** Failure to adequately operate and maintain the project and its facilities would jeopardize project integrity and potentially lead to an increase in the risk of damages from flooding. Reductions in recreational service

levels will potentially lead to reduced facility availability, decreased public safety, and lower levels of recreational visitor satisfaction. Reduction in environmental stewardship services may result in inability to monitor and control such things as cultural resource sites, endangered species, invasive species, and forestry resources.



Grenada Dam

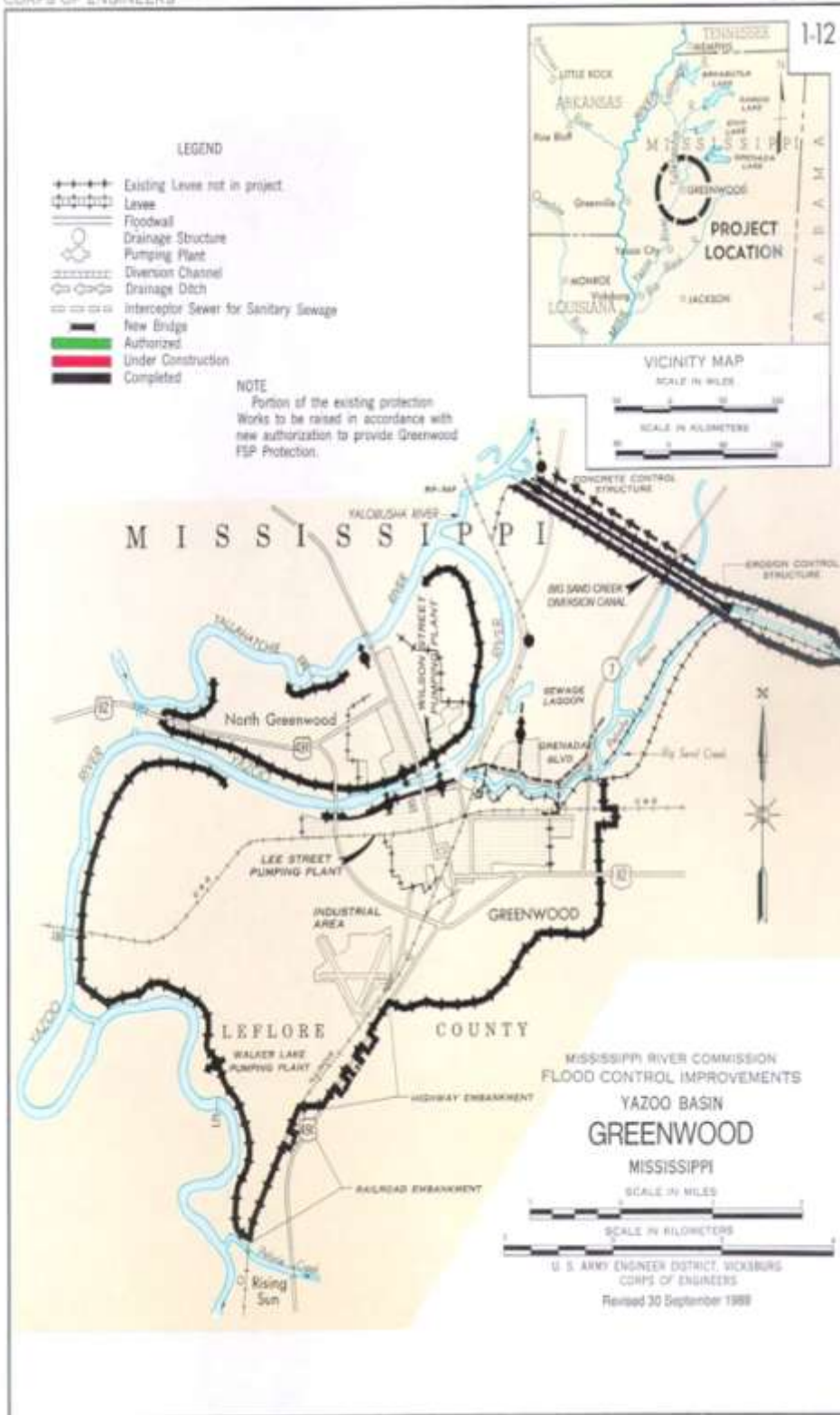
**Activities for FY 13:** Funds are being used to continue routine operation and maintenance at a reduced level of service in all authorized mission areas. Additional funds of \$2,470,000 could be used to achieve acceptable level of services (\$1,065,000), remedial work relief wells (\$500,000), E&D design to rehab outdated Visitor Center Exhibits (\$150,000), dam safety equipment (dump truck) (\$150,000), construct ADA fishing pier at Outlet Channel (\$155,000), replace shower house at North Graysport (\$150,000), upgrade restroom at Bryant (\$100,000), GIS/GPS equipment (\$25,000), purchase pavilion and restroom for the beach at Overlook (\$175,000).

**Acquisition Strategy:** None.

**Project Sponsor:** N/A.

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2), Nunnelee (MS-1).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$5,222,000	\$7,692,000



## Greenwood, Mississippi



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Greenwood, MS

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

#### Mississippi River and Tributaries, Maintenance (FRM)

**Location:** The project is located in the Yazoo Basin, Mississippi.

**Description:** The project includes the operation and maintenance of the city of Greenwood Protection Works and includes 55 miles of levees and 14 miles of channels, 2 miles of ditch, 59 drainage structures, 4 pumping plants and 7 weirs.

**Issues:** Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of providing adequate levels of funding to the O&M contractor for the removal of vegetation, encroachments and utility penetrations of the levees in the Greenwood Protection Works and to operate the drainage structures and pump stations on an as needed basis.

**Importance:** Greenwood is a major center of transportation and commerce for the portion of the State of Mississippi known as the Mississippi Delta. The project protects the city of Greenwood from flooding by the Tallahatchie, Yalobusha and Yazoo Rivers.

**Risk:** Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

**Consequence:** Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Item 184 –View of recent work towards removing trees from the levee slopes. Stumps are scheduled for removal in the near future.

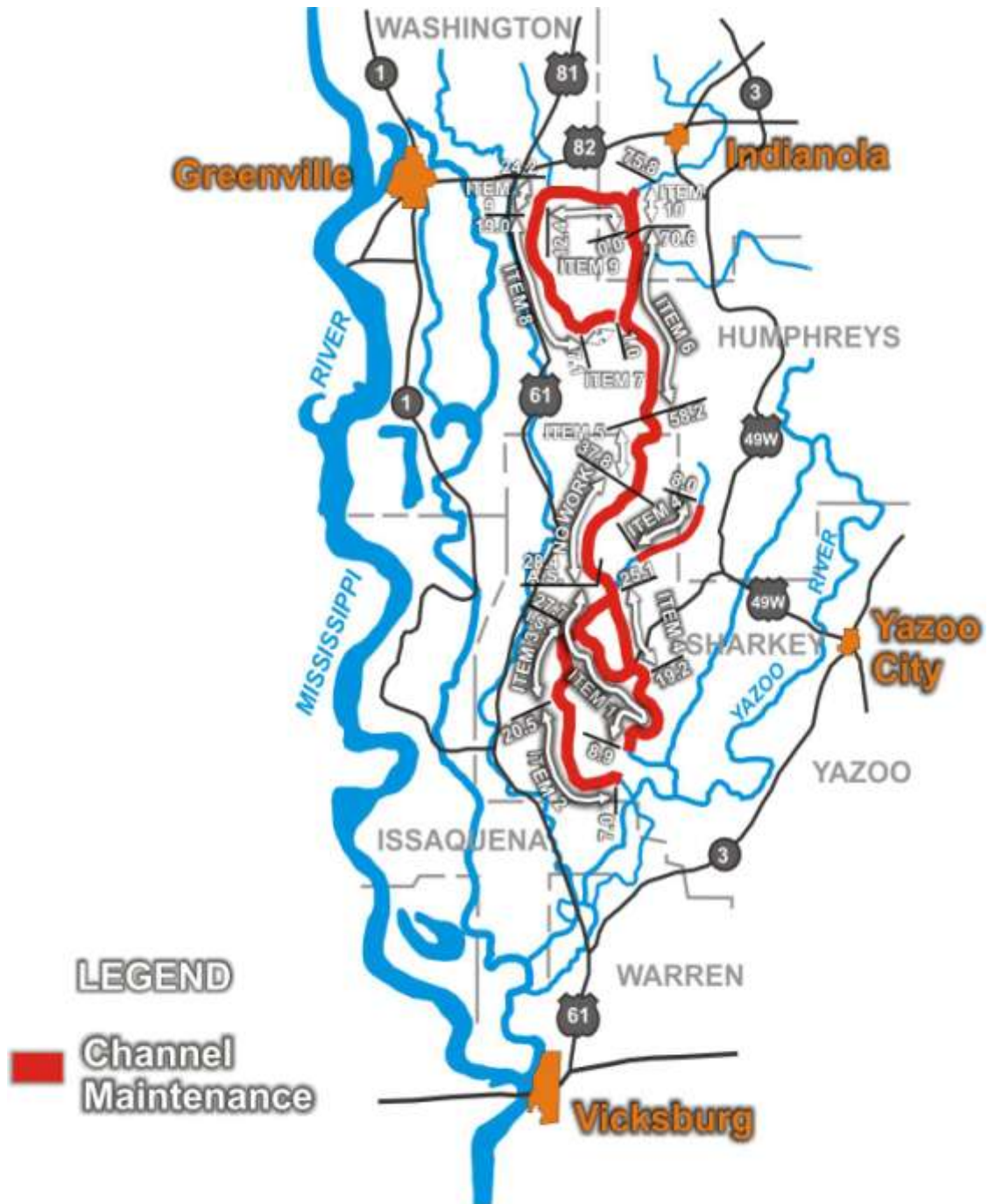
**Activities for FY 13:** Budgeted funds are being used to continue minimal operation and maintenance. Additional funds of \$1,925,000 could be used to achieve acceptable levels of service (\$800,000) and for levee safety related work (\$1,125,000).

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$788,000	\$2,713,000



Big Sunflower River, MS  
(Including Bogue Phalia)



**US Army Corps  
of Engineers**  
Vicksburg District

## Yazoo Basin, Big Sunflower River (Including Bogue Phalia), MS

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, 1946, 1962 and 1965

### Mississippi River and Tributaries, Maintenance (FRM)

**Location:** The Big Sunflower River Basin comprises an area of approximately 4,200 square miles in northwest Mississippi.

**Description:** The project was designed to provide flood protection via improvements to drainage channels that channel storm water runoff in the west central Yazoo Basin areas west of Highway 61 in the vicinity of Greenville, MS.

**Issues:** The existing flood control project is not currently functioning as originally constructed due to the loss of channel design capacity both from vegetative growth and sediment accumulation. The current project will restore the channels to original design capacities. Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of repairs to weirs constructed in the Bogue Phalia to maintain vegetation control and regulate storm water runoff.

**Importance:** The purpose of the remaining work in this project is to provide channel improvement that will reduce the flooding in Greenville from Main Canal and will protect 195,000 acres against the design flood and substantially benefit an additional 395,000 acres. Project mitigation for terrestrial and wetland losses will require acquisition of approximately 5,250 cleared acres of frequently flooded agricultural lands for reformulation.

**Risk:** Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

**Consequence:** Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Big Sunflower River

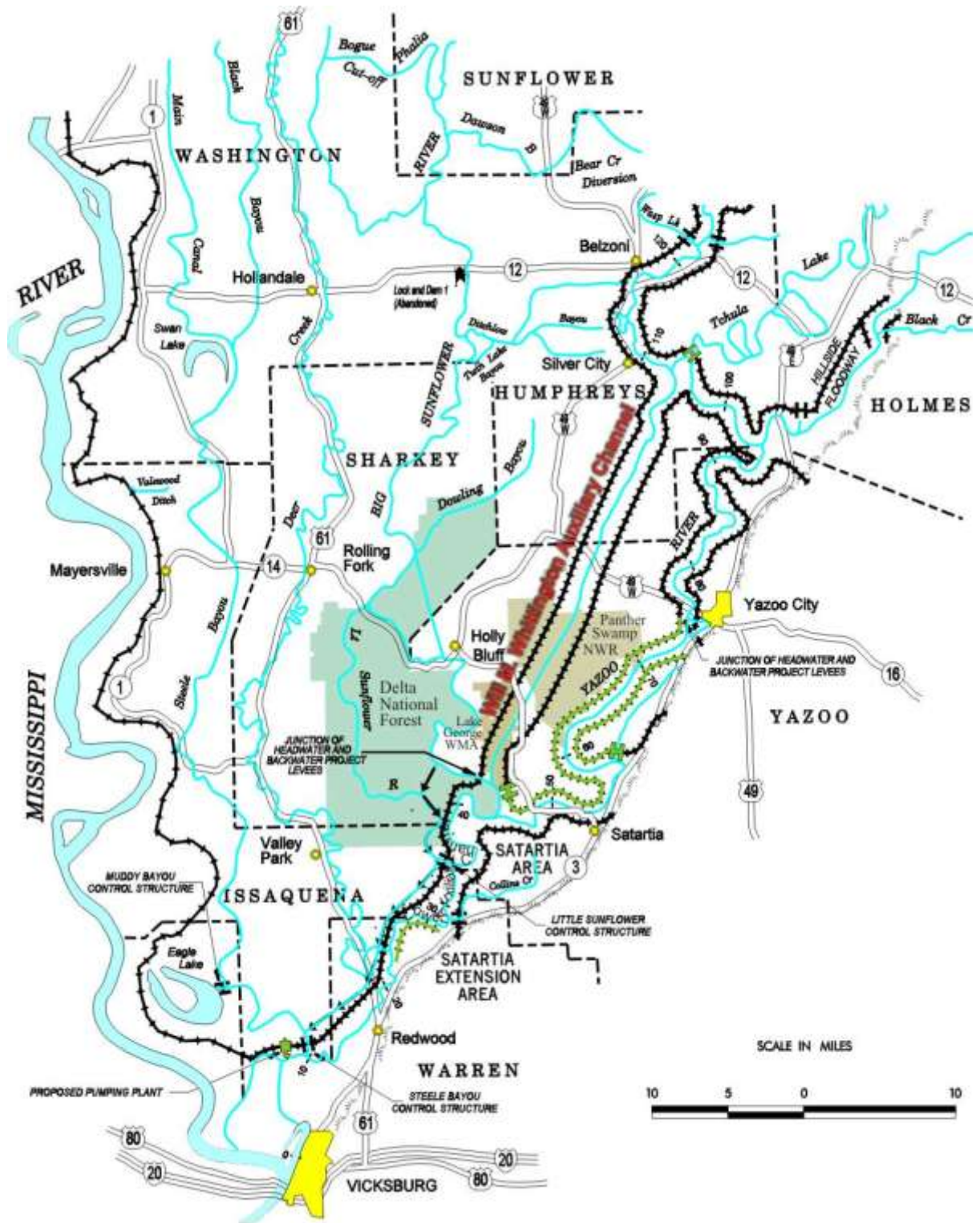
**Activities for FY 13:** Budgeted funds are being used for operation and maintenance of the project. Additional funds of \$400,000 could be used to maintain acceptable level of service (\$300,000) and continue wetland and aquatic monitoring within the project area (\$100,000).

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$177,000	\$577,000



Yazoo Backwater, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Yazoo Backwater, MS

Flood Control Acts of 1941, 1944, 1965

#### Mississippi River and Tributaries, Maintenance (FRM)

**Location:** The project is located in the Yazoo Basin, MS.

**Description:** The project includes the operation and maintenance of seven drainage structures.

**Issues:** Critical work is needed to ensure the integrity of the project to protect people and property from flooding. The Flood of 2011 demonstrated the requirement that the Steele Bayou, Little Sunflower and Muddy Bayou Structures be 100 percent reliable. To continue to provide this reliability, it is necessary that stoplogs that meet current Corps hydraulic steel structure standards be fabricated for the Steele Bayou Structure. These stoplogs will be used to provide access to the structure gates for inspection and repair, when necessary.

**Importance:** The flood control feature protects a large agricultural area and many small communities in the lower Yazoo Delta from backwater flooding of the Mississippi River.

**Risk:** Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

**Consequence:** Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Steele Bayou Drainage Structure on the Yazoo Backwater Levee

**Activities for FY 13:** Budgeted funds are being used to continue operation of project features. Additional funds of \$1,125,000 could be used for fabrication of stoplogs for Steele Bayou structure (\$1,000,000), maintenance and development of wildlife mitigation areas (\$100,000), and conduct HSS inspections of Steele Bayou stoplogs (\$25,000). Supplemental funds of \$3,135,000 will be used to award a contract to repair bank stability issues (\$3,075,000) and levee slides (\$60,000) on the Yazoo Backwater Levee System.

**Acquisition Strategy:** A construction contract will be awarded to repair bank stability issues near the levee system. Hired Labor forces will be used to repair the levee slides.

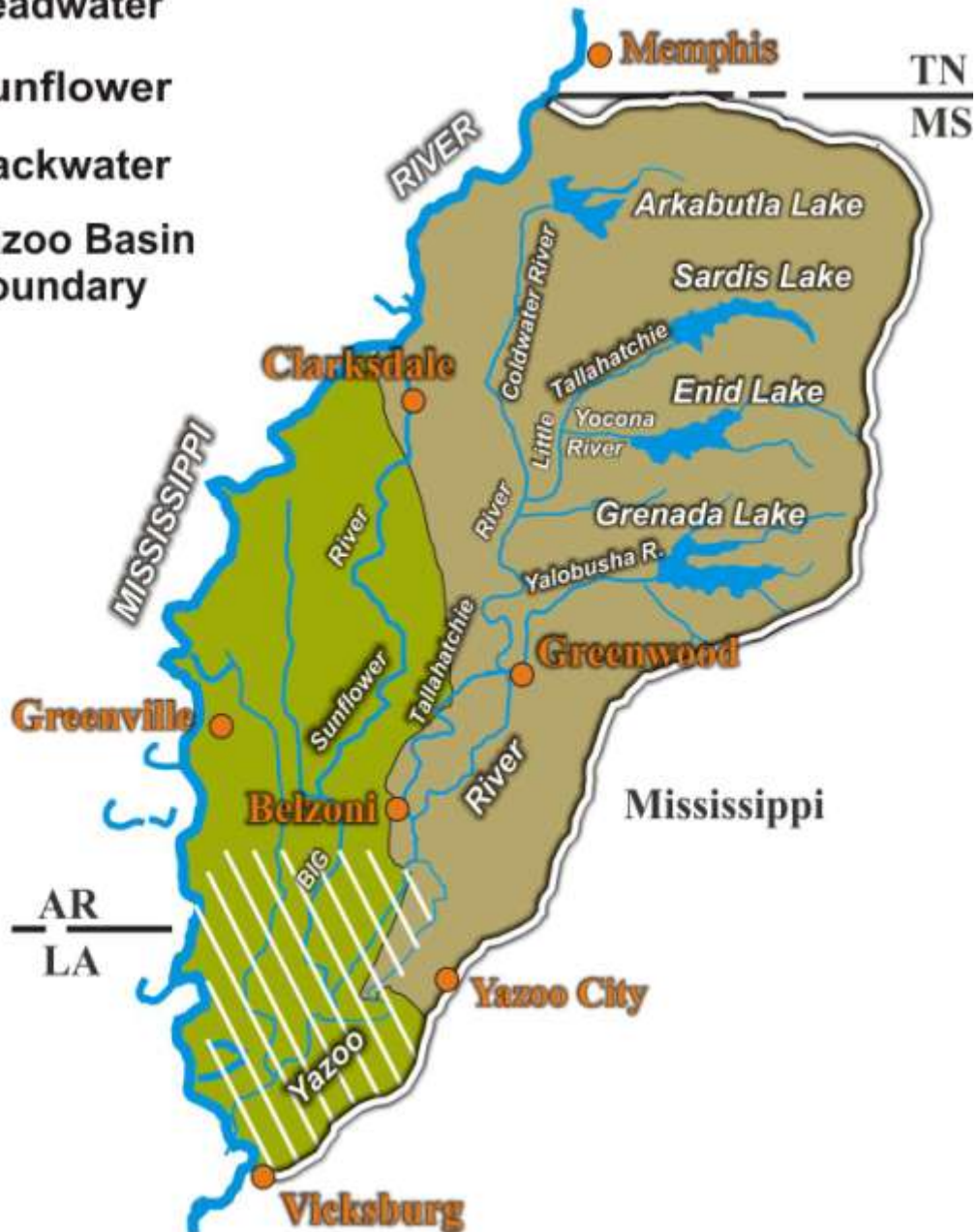
**Project Sponsor/Customer:** Board of Mississippi Levee Commissioners

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Supplemental	FY 13 Total Capability (Regular)
Maintenance	\$511,000	\$3,135,000	\$1,636,000

## Legend

-  Headwater
-  Sunflower
-  Backwater
-  Yazoo Basin Boundary



Yazoo Basin, Main Stem, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Main Stem, MS

Flood Control Acts of 1941, 1944, and 1965

#### Mississippi River and Tributaries, Maintenance (FRM)

**Location:** The project is located in the Yazoo Basin, MS.

**Description:** The project includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

**Issues:** Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This critical work consists of rebuilding the riverside face of 3.1 miles of the West Bank, Coldwater River Levee to USACE standards with impervious material and remove unwanted vegetation from within 15 feet of both levee toes. ARRA funds were used to purchase stone and perform bank stabilization at Item 3A2 and 290-L on the Yazoo River to protect adjacent levees.

**Importance:** The project provides flood protection to the Yazoo Basin along the Tallahatchie, Coldwater River below the spillway of Arkabutla Dam and the Yazoo River. Flood damage reduction measures include authorized levees, channels and appurtenant drainage structures. The incorporation of a spoil bank into 3.1 miles of the West Bank, Coldwater levee system resulted in this reach being decertified in 2010. The 2011 flood emphasized the need to complete this bank stabilization to preserve the integrity of the levees.

**Risk:** Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

**Consequence:** Failure to operate and maintain the project would jeopardize the project integrity and benefits. Plans and specifications are complete for the rehab of this reach of levee to provide flood protection and enable this reach to be recertified.



West Levee Sta. 681+00 – In this reach, existing spoil was shaped for the roadway and levee and the riverside slopes are heavily wooded. The Coldwater levee system contains numerous reaches similar to this.

**Activities for FY 13:** Budgeted funds are being used to continue minimal operation and maintenance. Additional funds of \$2,225,000 could be used to achieve acceptable levels of service (\$1,700,000), maintenance and development of wildlife mitigation areas (\$400,000), and levee safety related work (\$125,000). Supplemental funds are being used to design and repair bank stability issues on the levee system.

**Acquisition Strategy:** A construction contract will be awarded to repair bank stability issues on the Yazoo River near Silver City, Mississippi. Hired labor forces will be used to complete repair of bank stability issues at 3A-2 and 290L on the Yazoo River near Morgan City, Mississippi.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Supplemental	FY 13 Total Capability (Regular)
Maintenance	\$1,273,000	\$2,409,200	\$3,498,000



Greenville Harbor, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet Greenville Harbor, MS

Flood Control Act (FCA) of 1928, as amended by FCAs 1946, 1954, and WRDA 1986

### Mississippi River and Tributaries, Maintenance (NAV)

**Location:** The Greenville Harbor, located at Greenville, MS, provides access to the Mississippi River by way of a 250-foot-wide by 9-foot-deep channel. The harbor is located in an old bendway of the Mississippi River on Lake Ferguson, just southwest of the city of Greenville.

**Description:** The harbor and turning basin are 500 feet wide and 10,000 feet long, with a maintained depth of 9 feet at the lowest river stages. The harbor is connected to the Mississippi River by a channel 250 feet wide with a maintained depth of 9 feet at the lowest river stages. The project's purpose is to provide local businesses, industries and vessels navigating the Mississippi River access to the harbor facilities at Greenville.

**Issues:** Without maintenance dredging funds, this harbor will lose project dimensions during the busiest time of the year when crops are harvested and shipped via various ports and harbors along the Mississippi River.

**Importance:** This harbor provides a means for farmers, as well as other industries, in a large area of the Mississippi Delta a less costly means to ship commodities.

**Risk:** The loss of a dependable, reliable, and safe harbor will have significant adverse impacts on the region due to the increased shipping costs by rail and trucks.

**Consequence:** The many small communities and farmers served by this harbor will be forced to seek other, more costly means to move their products. Also, approximately 540 jobs could be lost, with an annual payroll of \$12.6 million.



Greenville Harbor

**Activities for FY 13:** Budgeted funds will be used to perform surveys. Additional funds of \$1,477,000 could be used for dredging.

**Acquisition Strategy:** None.

**Project Sponsor/Customer:** Greenville Port Commission

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$23,000	\$1,500,000



Vicksburg Harbor, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet Vicksburg Harbor, MS

Flood Control Act (FCA) of 1928, as amended by FCAs 1946, 1954, and WRDA 1986

### Mississippi River and Tributaries, Maintenance (NAV)

**Location:** The Vicksburg Harbor is located in west-central Mississippi at Vicksburg, MS, with access to the Mississippi River by way of the Yazoo River Diversion Canal.

**Description:** The harbor channel is 500 feet wide and 12,000 feet long with a 500 feet wide, 15,000 feet long channel on the Yazoo River Diversion Canal from the Mississippi River to the harbor entrance. The Upper Harbor channel is 150 feet wide. A minimum depth of 9 feet at the lowest Mississippi River stage is maintained. The project's purpose is to provide local businesses, industries and vessels navigating the Mississippi River access to the harbor facilities at Vicksburg. Riverside development within the project area has occurred along the east banks of the Mississippi River and the Yazoo Diversion Canal and extends upstream from the vicinity of Interstate 20 Highway Bridge for a distance of approximately 8 miles.

**Issues:** Local commerce and vessels navigating the Mississippi River use the harbor facilities at Vicksburg. The Vicksburg District's Mat Sinking Unit and Dredge *Jadwin* are moored at the Vicksburg Harbor during the off-season as well.

Without maintenance dredging funds, this harbor will lose project dimensions during the busiest time of the year when crops are harvested and shipped via various ports and harbors along the Mississippi River.

**Importance:** This harbor serves as a shipping point for a wide range of industries and is a major contributor to the local economy.

**Risk:** The loss of a dependable, reliable, and safe harbor will have significant adverse impacts on the region due to the increased shipping costs by rail and trucks.

**Consequence:** The many small communities and farmers served by this harbor will be forced to seek other, more costly means to move their products. Approximately 4,000 jobs could be affected with an annual payroll of \$80 million. The economic impact to the area is approximately \$564.8 million.



Vicksburg Harbor

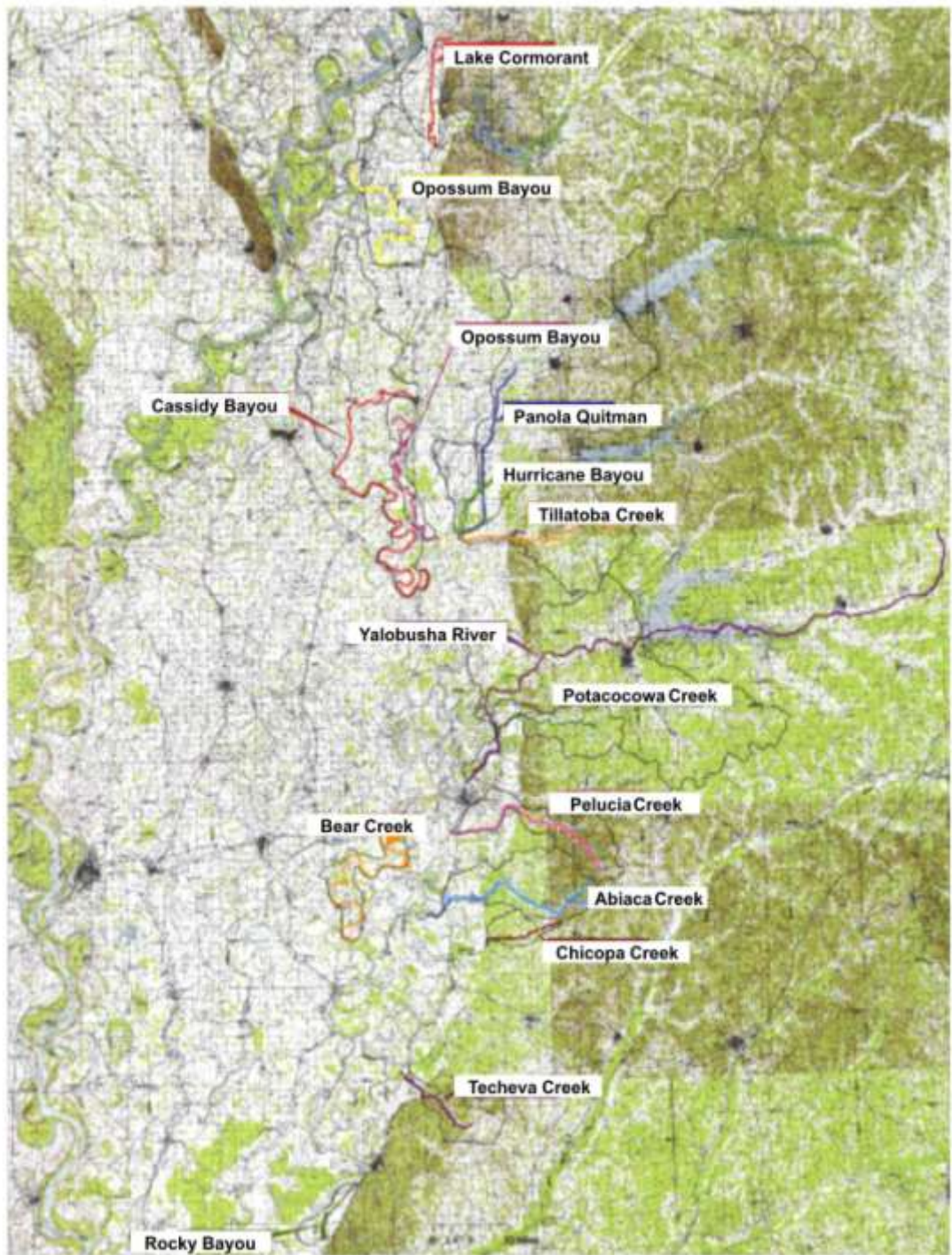
**Activities for FY 13:** Budgeted funds will be used to perform surveys. Additional funds of \$1,159,000 could be used for dredging.

**Acquisition Strategy:** None.

**Project Sponsor/Customer:** Vicksburg/Warren County Port Commission

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$41,000	\$1,200,000



Yazoo Basin, Tributaries, MS



**US Army Corps  
of Engineers**  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Tributaries, MS

Flood Control Acts of 1941, 1944, and 1965

#### Mississippi River and Tributaries, Maintenance (FRM)

**Location:** The project is located in the Yazoo Basin, MS.

**Description:** The project includes the operation and maintenance of 136 miles of levees, 287 miles of channels, and 74 drainage structures.

**Issues:** Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of providing adequate levels of funding to the O&M contractor for the removal of vegetation and encroachments and to operate the drainage structures on an as-needed basis.

**Importance:** The project provides flood protection to the Yazoo Basin along the Little Tallahatchie, Yalobusha, and Yocona Rivers from the spillways of Sardis, Enid, and Grenada Dams to the main stem of the Yazoo River and various smaller tributary streams that empty directly into the Yazoo River. Flood damage reduction measures include authorized levees, channels and appurtenant drainage.

**Risk:** Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

**Consequence:** Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Ascalmore-Tippo Sta. 335+00 – North Levee

**Activities for FY 13:** Budgeted funds are being used to continue operation and maintenance at a reduced level of service. Additional funds of \$200,000 could be used to achieve acceptable levels of service. Supplemental funds will be used to make levee system repairs.

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13. The existing O&M contract will be utilized to make the repairs.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Supplemental	FY 13 Total Capability (Regular)
Maintenance	\$944,000	\$100,000	\$1,144,000



Will M. Whittington Auxiliary Channel, MS



US Army Corps  
of Engineers  
Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Will M. Whittington Auxiliary Channel, MS

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, 1946, 1962 and 1965

#### Mississippi River and Tributaries, Maintenance (FRM)

**Location:** The project is located in west Mississippi in portions of Yazoo and Humphreys Counties and is a part of the Yazoo Basin Headwater Area.

**Description:** The project includes a leveed floodway and landside drainage ditches from the vicinity of Silver City on the Yazoo River to near the mouth of Big Sunflower River.

**Issues:** Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of providing adequate levels of funding to the O&M contractor for the removal of vegetation and encroachments and place granular surface material on the levees as needed to provide all-weather access.

**Importance:** This flood control feature in the Yazoo Basin headwater area is a leveed floodway that splits the flows of the Yazoo River and reduces flood stages on the Yazoo River. The levee provides major flood protection to areas between the Will Whittington Levee and the Mississippi River east bank levee.

**Risk:** Leaving the project in disrepair may lead to levee safety issues, levee certification issues and reduced levels of flood protection and higher risks.

**Consequence:** Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Will M. Whittington Levee

**Activities for FY 13:** Budgeted funds are being used to continue operation and maintenance of project features. Additional funds of \$116,000 could be used to achieve acceptable levels of service. Supplemental funds are being used to repair levee surfacing that was degraded during the 2011 flood fight.

**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Supplemental	FY 13 Total Capability (Regular)
Maintenance	\$375,000	\$100,000	\$491,000





**US Army Corps  
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Vicksburg District

## Project Fact Sheet

### Yazoo Basin, Yazoo City, MS

Flood Control Acts of 1928, 1936, 1937, 1938, 1941, 1944, and 1946

#### Mississippi River and Tributaries, Maintenance (FRM)

**Location:** The project is located in the Yazoo Basin.

**Description:** The project includes the operation and maintenance of Yazoo City Protection Works and includes levees, channels, drainage structures, pumping plants and weirs.

**Issues:** Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This work consists of providing adequate levels of funding for the O&M contractor to operate the drainage structures and pump station on an as-needed basis.

**Importance:** The city of Yazoo City was established on a bendway of the Yazoo River. Yazoo City is a major center of transportation and commerce where the uplands of Mississippi meets that portion of the state of Mississippi known as the Mississippi Delta. These flood damage reduction measures protect Yazoo City from flooding from the Yazoo River.

**Risk:** Leaving the project in disrepair may lead to flooding issues and reduced levels of flood protection in the project area.

**Consequence:** Failure to operate and maintain the project would jeopardize the project integrity and benefits.



Yazoo City Protection Works - East Levee - Station 44+00

**Activities for FY 13:** Budgeted funds are being used to continue operation and maintenance of project features, rehabilitate pipe structures, and evaluate levee seepage concerns. Additional funds of \$125,000 could be used to fund levee safety related work.

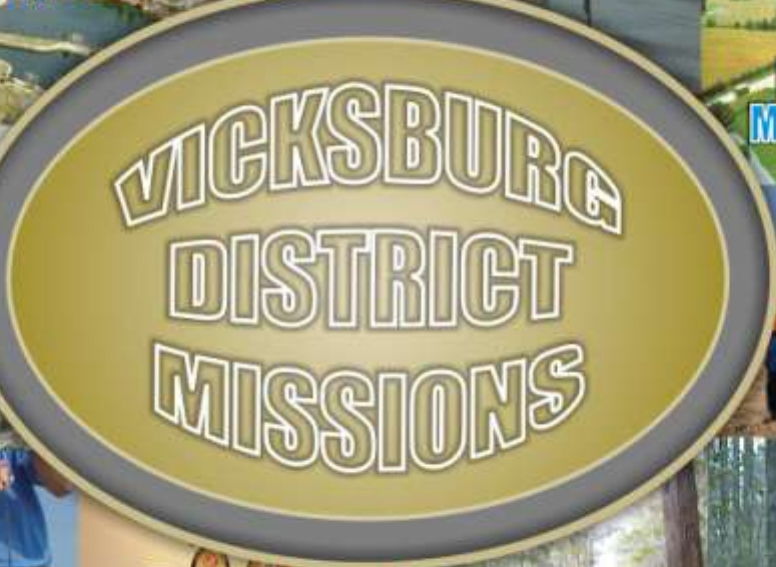
**Acquisition Strategy:** No contracts are scheduled to be awarded in FY 13.

**Project Sponsor/Customer:** Yazoo-Mississippi Delta Levee Board

**Congressional Interest:** Senate: Wicker and Cochran (MS); House: Thompson (MS-2).

Phase	FY 13 Budget	FY 13 Total Capability
Maintenance	\$714,000	\$839,000







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